

DATED

THE OPERATORS

TRANSPORT TRADING LIMITED

PAYG AGREEMENT

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- 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 shall, in the absence of provision to the contrary, relate to the paragraph in that Schedule;
- 1.7 in the event, and only to the extent, of any conflict between the Clauses and the Schedules, the Clauses prevail, except where the conflicting part of the Schedule is explicitly expressed to take precedence;
- 1.8 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;
- 1.9 the expression "person" means any individual, firm, body corporate, unincorporated association, partnership, government, state or agency of a state or joint venture;
- 1.10 the words "including", "includes" and "included" will be construed without limitation unless inconsistent with the context.

2. Commencement

- 2.1 This Agreement and each Implementation Agreement and each Services Agreement (where applicable) to be entered into by the Parties is conditional upon and shall be effective upon: -
- (a) a Scheme being in force between the Operators as necessary to take account of this Agreement;
 - (b) the Amended Clearance Agreement being entered into and taking effect;
 - (c) each Operator who is to become a Party to this Agreement at the date of signature of this Agreement receiving any and all such directions and consent(s) from the Secretary of State as it considers it requires in order to enter this Agreement;
 - (d) TTL having received at or before the date of this Agreement any such direction from the Mayor of London as it considers it requires in order to enter into this Agreement; and
 - (e) TTL having entered into an Implementation Agreement and/or a Services Agreement with each Operator who, as at the date of signature of this Agreement, is Party to this Agreement if and to the extent that Schedule 12 indicates that either or both an Implementation Agreement or a Services Agreement is required for that Operator.
- 2.2 A notice signed by TTL and ATOC and served on all Parties stating that each of the conditions in Clause 2.1 have been met, shall as between the Parties be conclusive evidence that the conditions have been satisfied.
- 2.3 For TTL and each Operator who is a party to Existing PAYG Acceptance Arrangements the following transitional arrangements shall apply: -
- (a) the Existing PAYG Acceptance Arrangements shall continue to apply up to the Operator Launch Date for that Operator;

- (b) accordingly for the avoidance of doubt, the provisions of this Agreement shall only apply in respect of: -
 - (i) the acceptance of PAYG by that Operator; and
 - (ii) the allocation of revenue to that Operator in respect of PAYG; and
 - (iii) retailing TTL Smartmedia and agreed PAYG fare products that these media are capable of containing from and including the Operator Launch Date for that Operator; and
 - (iv) the TTL Services from and including the dates set out in the Services Agreements.

3. Acceptance of PAYG

3.1 Subject to the provisions of this Agreement and with effect from the date specified in Clause 3.2, the Parties agree to accept PAYG as a means of payment on the following journeys (which in the case of Rail Journeys are more particularly described in Part 1 of Schedule 3) as follows:

- (a) in the case of TTL, on Passenger Transport Services provided by:
 - (i) LUL;
 - (ii) DLR;
 - (iii) London Overground; and
 - (iv) TCL

together with those bus services which together make up the London bus network (as defined in Section 181 of the Greater London Authority Act 1999). TTL shall be compliant with this Clause even if it does not accept PAYG on all such Passenger Transport Services provided that this is because those services are on routes that include stations that it does not operate and at which PAYG is not accepted (and TTL shall accept PAYG on such routes to the extent that in its reasonable opinion it can do so without impacting on operational effectiveness and its ability to operate effective revenue protection); and

- (b) in the case of an Operator, on Relevant Operator Services. An Operator shall be compliant with this Clause even if it does not accept PAYG on all its Relevant Operator Services provided this is because those services are on routes that include stations that it does not operate and at which PAYG is not accepted within the PAYG Area (and the Operator shall accept PAYG on such routes to the extent that in its reasonable opinion it can do so without impacting on operational effectiveness and its ability to operate effective revenue protection).

3.2 The obligation in Clause 3.1 shall apply from: -

- (a) the PAYG Launch Date, in the case of TTL;

- (b) the Operator Launch Date in the case of each Operator who is a party to this Agreement at the date of this Agreement (except to the extent provided in Schedule 13); and
- (c) in respect of any Operator adhering to this Agreement after its signature date, the effective date of such adherence.

3.3 TTL shall have the right from time to time to permit any person to accept PAYG, subject to the following:-

- (a) as between the Parties to this Agreement, there shall be no requirement for any such person to be Party to this Agreement in order to accept PAYG;
- (b) it is Clause 3.6 and not this Clause 3.3 which shall apply in respect of the admission of any new person to be a Party as an Operator for the purposes of this Agreement;
- (c) TTL warrants to each Operator at the relevant time that if TTL permits any new person, who is at that time a new person, to accept PAYG, no such acceptance shall result in:-
 - (i) an increase in the costs to the Operator of complying with its obligations under this Agreement, any Implementation Agreement (if applicable) or any Services Agreement (including an increase in the level of the TTL Charges);
 - (ii) a reduction in Operator revenue as a result of any change in the Daily Discount Factor; and
- (d) TTL will, where it permits any new person to accept PAYG:-
 - (i) give ATOC not less than 90 calendar days prior notice of the identity of the new person whom it intends to allow to accept PAYG; and
 - (ii) have due regard to any representations which ATOC may raise on behalf of any Operator(s) regarding any adverse effect on their reputation and standing which they reasonably consider will arise if the new person is allowed to accept PAYG

provided that:-

- (1) nothing in this Clause 3.3(d) is intended to or will require TTL to act unlawfully; and
- (2) this Clause 3.3 (d) will not apply where the new person is or will be a provider of Passenger Transport Services charging Category 2 Fares (in accordance with Schedule 2 Paragraph 2a) under contract to or authorised by TTL to accept PAYG as a means of payment.

3.4 TTL shall ensure that any new operator of rail Passenger Transport Services accepting PAYG for Rail Journeys shall be required to have in place the obligations provided for in Schedule 5 (PAYG Operating Requirements) to the extent that such requirements are appropriate and applicable in the context of such new operator's network and operation and mode of transport.

3.5 [Not used]

3.6 The Parties agree that the following provisions set out in this Clause 3.6 shall, subject always to Clause 18.4, apply in respect of the admission of other persons as Operators to the arrangements provided for in this Agreement:

(a) Subject to Clause 3.6 (c), any person may become an Operator without the consent of TTL if:

(i) written notice of such person's intention to become a Party to this Agreement is given to TTL by ATOC. Such notice period will be:-

(1) at least 120 calendar days except where (2) below applies; and

(2) subject to Clause 3.6(c) at least 270 calendar days where and to the extent that such person is intending and will on admission be a Successor Operator;

(ii) such person is at the time of the notice a person to whom paragraph (a) of the definition of "Operator" in Schedule 1 applies or TTL is satisfied (acting reasonably) that such person will be such a person before the expiry of the notice referred to in Clause 3.6 (a) (i) and such person has given TTL such commitments and undertakings as TTL may reasonably require in the circumstances for that purpose;

(iii) such person is at the time of the notice a member of the Scheme and such membership has been confirmed in writing to TTL by ATOC or TTL is satisfied (acting reasonably) that such person will be a member before the expiry of the notice referred to in Clause 3.6 (a) (i) and such person has given TTL such commitments and undertakings as TTL may reasonably require in the circumstances for that purpose;

(iv) such person has executed and delivered with the notice in Clause 3.6 (a) (i) a deed of adherence substantially in the form of the deed set out in Schedule 6 or TTL is satisfied (acting reasonably) that such person will do so before the expiry of the notice referred to in Clause 3.6 (a) (i) and such person has given TTL such commitments and undertakings as TTL may reasonably require in the circumstances for that purpose; and

(v) such person has executed and delivered with the notice in Clause 3.6 (a) (i):-

- (1) a Services Agreement with TTL; and
- (2) an Implementation Agreement with TTL for the implementation of PAYG Equipment if and to the extent that such person is taking over the operation of existing Operators' Services or Operator Stations and the work required to be carried out under the Implementation Agreement of the relevant outgoing Operator(s) has not been completed

in each case to take effect from the date on which such person becomes a Party to this Agreement, or TTL is satisfied (acting reasonably) that such person will do so before the expiry of the notice referred to in Clause 3.6 (a) (i) and such person has given TTL such commitments and undertakings as TTL may reasonably require in the circumstances for that purpose.

- (b) Such person shall, upon expiry of the notice referred to in Clause 3.6(a) and subject to having satisfied the conditions set out in Clause 3.6 (a)(ii)-(v), become an Operator for the purposes of this Agreement.
- (c) Where a proposed Operator is to be included in the arrangements for PAYG because it is taking over the operation of existing Operators' Services the provisions of Clauses 3.6(a) and 3.6(b) shall apply except where and to the extent that the Secretary of State has undertaken in terms acceptable to TTL and ATOC that the Secretary of State will procure that one or more Successor Operators will take over such services on the cessation of the participation of an existing Operator. In those circumstances, the time period referred to in Clause 3.6(a)(i)(2) shall be deemed to be amended to such shorter period as shall be agreed by TTL, ATOC and the Secretary of State for the purpose of the operation of this paragraph.

3.7 The Parties agree that the following provisions shall not apply to any Operator who is an Open Access Operator:-

- (a) Clause 18.6; and
- (b) Clause 18.7.

4. Appointment of ATOC As Representative

- 4.1 Each of the Operators has entered into this Agreement as principal and hereby appoints ATOC as its representative to act as its agent in accordance with this Clause 4 for as long as the Operator is a Party to this Agreement.
- 4.2 ATOC is appointed by each of the Operators as its agent in accordance with this Clause 4 to negotiate with and give notices, consents, waivers and receipts in accordance with this Agreement to TTL and to agree amendments with TTL and to perform all other actions expressed to be performed by ATOC under this Agreement. ATOC is not a party to this

Agreement and only acts as an agent on behalf of each Operator in accordance with that Operator's instructions or pursuant to the Scheme. ATOC is not liable for the performance of an Operator's obligations which shall be the individual liability of that respective Operator.

4.3 Except where expressly provided otherwise in this Agreement, no notice, consent or waiver under this Agreement purported to be given:

- (a) by an Operator on behalf of another Operator or Operators;
or
- (b) by an Operator in respect of any of the matters for which ATOC is appointed agent under this Agreement

shall have any effect provided that for the avoidance of doubt, this Clause 4.3 shall not apply in respect of any notice consent or waiver under a Services Agreement or Implementation Agreement.

4.4 The Operators undertake to TTL, jointly and severally to procure the performance by ATOC of any action to be performed by ATOC hereunder.

5. Contract Management

5.1 Contract Management Structure

- (a) The Parties shall comply with the provisions of Schedule 19 (Contract Management Structure) provided that:
 - (i) the groups listed in paragraph 2 of Schedule 19 shall not have the right to vary the rights or obligations of any Party to this Agreement without the express written agreement of the Party concerned; and
 - (ii) the groups listed in paragraph 2 of Schedule 19 shall not have the right to impose any additional obligations or confer any additional rights upon any Party to this Agreement, any Implementation Agreement (if applicable) or the Services Agreement without the express written agreement of the Party concerned.
- (b) Nothing in Clause 5.1(a) and Schedule 19 shall be deemed to amend or vary any provision of this Agreement, the Services Agreement or Implementation Agreement (if applicable), except that it will have precedence over Clause 3.1 of the Services Agreement and any equivalent clause of the Implementation Agreement.

5.2 In addition to the provisions of Schedule 19, the Parties will establish the Committee in accordance with Clause 5.3 provided that the Committee shall not:

- (a) have the right to vary the rights or obligations of any Party to this Agreement without the express written agreement of the Party concerned; nor

- (b) have the right to impose any additional obligations or confer any additional rights upon any Party to this Agreement, any Implementation Agreement (if applicable) or the Services Agreement without the express written agreement of the Party concerned.

5.3 The Committee shall:

- (a) be chaired by a Transport for London director with responsibility for PAYG as a whole;
- (b) include senior representatives of the operating units of Transport for London that accept PAYG and senior representatives of ATOC and the Operators;
- (c) meet at least quarterly. It will be the responsibility and right of the Chairman (or such other person as he may nominate from time to time) to:
 - (i) determine and give not less than 21 calendar days notice of the date, place and time of each meeting;
 - (ii) circulate an agenda and any relevant supporting papers to members of the Committee prior to each meeting;
 - (iii) call special meetings of the Committee on giving notice deemed reasonable by the Chairman in the circumstances. ATOC shall also have the right to call special meetings on giving notice deemed reasonable by the Chairman in the circumstances provided always that such notice shall not exceed 28 calendar days; and
 - (iv) prepare and distribute minutes of each meeting.
- (d) subject to Clause 5.5:
 - (i) discuss and consider the operation of PAYG by all organisations accepting PAYG;
 - (ii) monitor adherence to the PAYG Operating Requirements (Schedule 5) including OCOP and review changes to OCOP;
 - (iii) discuss and consider the development of PAYG and the PAYG System, including system development priorities, PAYG System vendor selection, and any other supply contracts that enable PAYG operation;
 - (iv) consider and discuss issues arising out of any previous Committee meeting; and
 - (v) consider and discuss any issues referred to it relating to this Agreement.

5.4 For the avoidance of doubt the Committee shall not have in its remit fares structure and/or pricing.

5.5 In the operation of the Committee, the Operators shall not be treated less favourably than any other Party, including but not limited to the operating units of Transport for London that accept PAYG.

6. Rights

6.1 Subject always to Clauses 6.3, 6.4 and 6.5, TTL grants to each Operator a royalty-free, non-exclusive, non-transferable licence to use the PAYG System and all other Intellectual Property Rights necessary for the use of PAYG under this Agreement, the Implementation Agreement (if applicable) and the Services Agreement, such right to use:

- (a) to be only for the term of this Agreement, or until cessation of the Operator's participation in this Agreement if earlier, at which point such licence rights will automatically terminate;
- (b) to be restricted to the use necessary for the purposes of exercising and receiving the Operator's rights as envisaged by this Agreement (including, without limitation, the provisions of Schedule 10 to this Agreement) and, where applicable, the Operator's Implementation Agreement and Services Agreement; and
- (c) shall not include any right of decompilation nor any right to amend or alter such Intellectual Property Rights or any matter or thing which contains or is the subject of those Intellectual Property Rights.

6.2 An Operator may not use PAYG (including, without limitation, the PAYG System and/or the PAYG Equipment) for any purpose other than the performance of this Agreement in accordance with its terms without the written consent of TTL such consent not to be unreasonably withheld or delayed subject to the agreement by the Parties of the terms of such use.

6.3 Subject to the provisions of Clause 6.5:-

- (a) and subject to the provisions of Clauses 6.3 (c) and (d), the licence under Clause 6.1 includes the licence to an Operator of the right to use the "Oyster" name and logo as more specifically set out in Schedule 18 and any other connected or derivative mark(s) described in Clause 6.3 (b) (together for the purposes of this Clause 6 "the PAYG Branding"):-
 - (i) for so long as TTL uses the same as the principal branding in respect of TTL Smartmedia and/or PAYG and as is necessary for the use of PAYG under this Agreement; and
 - (ii) subject to compliance by the Operator with such conditions as apply to the use of the PAYG Branding by the TTL Group from time to time, as notified by TTL to ATOC from time to time provided that:
 - (1) in so far as such conditions of use are matters within its control or the control of a member of the TTL Group:-

- (A) the conditions of use and any changes to them pursuant to this Clause shall be reasonable; and
 - (B) TTL shall give not less than 3 months prior written notice of any such changes; and
- (2) any changes to such conditions shall take effect as a Required Change and the provisions of Schedule 9 shall apply accordingly in respect of the changes pursuant to this Clause 6.3(a)(ii)(2), provided that:-
- (A) the proviso in paragraph 5 of Schedule 9 shall not apply; and
 - (B) TTL shall not be obliged to compensate an Operator in respect of any costs and losses suffered or incurred as a consequence of the changes to the extent that they are attributable to use of the PAYG Branding in a manner or to an extent which is beyond the level which would have been required in order merely to comply with the Operator's obligations pursuant to this Agreement;

and for the purposes of Clause 6.3 (a) (ii) (1), a condition shall not be within the control of TTL or a member of the TTL Group to the extent that such condition is a condition imposed by a third party and with which TTL or the member of the TTL Group is required to comply; and shall not be unreasonable if it is necessary (in the reasonable opinion of TTL) to protect any Intellectual Property Rights in respect of the PAYG Branding.

- (b) If the Operators reasonably require the use of any additional name and/or logo (other than the "Oyster" name and logo as more specifically set out in Schedule 18) owned or controlled by any member of the TTL Group ("the TTL Marks") in order to enable the Operators to operate and/or promote PAYG in accordance with the provisions of this Agreement, the Operators shall be entitled to request that TTL shall grant a licence of the TTL Marks to the Operators, and TTL shall not unreasonably withhold its consent to such request provided that TTL shall be entitled to set out in such licence any provisions it may reasonably require for the protection of any and all rights in the TTL Marks and, for the avoidance of doubt, the provisions of Clause 6.4 shall apply to any such use of the TTL Marks by the Operators.
- (c) TTL shall have the right to cease to use or licence the PAYG Branding (or any part of it) and to terminate the Operators' licence in respect of the same in accordance with the following:-

- (i) TTL shall give at least 6 months' notice to ATOC (or, if the cessation to use or licence arises because TTL is no longer entitled to use or licence the PAYG Branding or part of it, notice as soon as possible) if and when TTL proposes to cease to use the PAYG Branding (or any part of it) at all or as the principal brand associated with TTL Smartmedia and/or PAYG, stating when such proposed cessation is proposed to occur, which shall also be the date on which the Operators' licence in respect of the use of the PAYG Branding shall terminate;
- (ii) such notice shall take effect as a notice declaring a Required Change (as defined in paragraph 5 of Schedule 9) and, subject to Clause 6.6, the provisions of Schedule 9 shall apply accordingly in respect of the changes effected pursuant to this Clause 6.3(c), provided that:
 - (1) the proviso in paragraph 5 of Schedule 9 shall not apply; and
 - (2) TTL shall not be obliged to compensate an Operator in respect of any costs and losses suffered or incurred as a consequence of the changes to the extent that they are attributable to use of the PAYG Branding in a manner or to an extent which is beyond the level which would have been required in order merely to comply with the Operators' obligations pursuant to this Agreement;
- (iii) upon the giving of such notice under Clause 6.3(c) (i), or as soon as reasonably practicable thereafter, TTL shall notify and consult with ATOC in respect of the name and/or logo with which TTL proposes to replace the PAYG Branding ("the Successor Branding"):-
 - (1) which shall be a name and/or logo which is not solely or mainly associated with TfL (provided that nothing herein shall restrict or prevent TfL itself from using such name in conjunction with names which are solely or mainly associated with TfL); and
 - (2) which in TTL's reasonable opinion is sufficiently neutral to be suitable for use in relation to both TTL Passenger Transport Services and the Operators' Services("the Neutrality Test");
- (iv) TTL shall not unreasonably disregard any response(s) it receives from ATOC in respect of such consultation, but the Parties acknowledge that the choice of the

Successor Branding is, subject to the Neutrality Test, a matter for TTL;

- (v) TTL grants each Operator a licence to use the Successor Branding on the same terms, mutatis mutandis as govern the licensing of the PAYG Branding under Clause 6.1 and this Clause 6.3.
- (d) For the avoidance of doubt, the Operators shall not incur a licence fee for any licence granted under this Clause 6.3.

6.4 (a) Each Operator acknowledges that: -

- (i) it shall not acquire any title or interest in the PAYG Branding and/or the Successor Branding and/or the TTL Marks and all goodwill arising in relation to the use of the PAYG Branding and/or the Successor Branding and/or the TTL Marks shall enure for the benefit of the owner of the Intellectual Property Rights in such PAYG Branding and/or the Successor Branding and/or the TTL Marks;
- (ii) the licence granted under Clause 6.1 and 6.3 (and the licence of the TTL Marks referred to at Clause 6.3) does not entitle the use of any element of the PAYG Branding and/or the Successor Branding and/or the TTL Marks as part of any trade name or corporate title of the Operator, or (except with prior written consent of TTL) the domain name of the Operator;
- (iii) it shall not:
 - (1) adopt or use any trade mark, symbol or device which incorporates or is confusingly similar to, or is a simulation or colourable imitation of any element of the PAYG Branding and/or the Successor Branding and/or the TTL Marks except to the extent permitted by Clauses 6.4 (b) and (c);
 - (2) during the period of this Agreement, apply anywhere in the world to register any trade marks identical to or so nearly resembling any element of the PAYG Branding and/or the Successor Branding (subject to Clause 6.4 (b)) and/or the TTL Marks as to be likely to deceive or cause confusion.
- (b) The provisions of Clauses 6.4 (a) (iii) (1) and (2) above shall only apply in respect of the Successor Branding as from the date that ATOC is first notified of any significant feature or aspect of the name and/or logo which it is proposed by TTL shall comprise the Successor Branding as set out at Clause 6.3 (c) (iii).
- (c) The Operators shall have no liability to TTL pursuant to Clause 6.4 (a) (iii) (1) if and to the extent that an Operator is required by the Secretary of State to use any trade mark, symbol or device which would otherwise result in the Operator being in breach of that Clause. In such circumstances, TTL gives no warranty and shall

have no liability to such Operator(s) in respect of any such use including in respect of any claim by a third party relating to such use.

- 6.5 Subject and without prejudice to this Clause 6, the Intellectual Property Rights in the PAYG Marketing Material from time to time shall be licensed in accordance with Schedule 10 of this Agreement.
- 6.6 In the event of a change to the PAYG Branding pursuant to Clause 6.3 (c) ("Re-Branding"), the costs payable by TTL to each Operator under paragraph 8 of Schedule 9 are, to the extent that such costs arise directly from the Re-Branding, the reasonable costs (including reasonable internal costs) incurred by the Operator in:
- (a) replacing any PAYG related material or medium (including web based media) which the Operator must replace or alter due to the Re-Branding (which shall include all reasonable costs associated with producing such new marketing material or re-designing such medium, including design preparation and printing costs, and re-distribution costs); and
 - (b) replacing any signs which must be replaced due to the Re-Branding (which shall include all reasonable costs associated with producing the new signs, including design preparation, manufacturing and installation costs)

in both cases subject to the following:

- (i) the Operator will use reasonable endeavours to mitigate such costs, which shall include, without limitation, the Operator ensuring that it does not pay more than the relevant supplier's list price for the goods and services; and
- (ii) the Operator will provide TTL with reasonable evidence of the actual expenditure.

7. Joint Duties Of The Operators and TTL

- 7.1 Each of the Operators and TTL shall comply with their respective obligations under the Schedules.
- 7.2 The Parties shall each undertake the responsibilities listed below in this Clause and co-operate in the execution of those responsibilities in each case with a view to ensuring, where possible, the efficient and consistent operation of PAYG:
- (a) to promote and encourage the use of PAYG to the extent that this is not in conflict with or to the detriment of the provision of any other of that Party's services, products or promotions;
 - (b) to facilitate the use of PAYG and implementation of this Agreement;
 - (c) to co-operate closely on revenue protection issues; and

- (d) to co-operate to agree changes to the OCOP and/or Schedule 10 (Marketing, Advertising and Public Statements) where reasonably required in order to improve operations and to the extent not in conflict with or to the detriment of the provision of any other of that Party's services, products or promotions.

7.3 Each Party will comply with all applicable laws and regulations in performing its respective obligations under this Agreement.

7.4 TTL and ATOC shall each notify the other as soon as reasonably practicable after coming to their attention, of any events or circumstances which may adversely affect the performance of its respective obligations under this Agreement (which in the case of ATOC means the obligations of any Operator), in whole or in part, or which are reasonably likely to result in a material negative impact upon the performance of that Party's obligations, including any relevant:

- (a) delay or failure of performance under, or termination of, any subcontract;
- (b) threat of or planned industrial action, including any strikes or lock-outs;
- (c) interruption or unavailability of power supplies or telecommunications networks;
- (d) failure of the PAYG System or PAYG Equipment; or
- (e) loss or corruption of any of an Operator's Magnetic Gate Data (as such is described in Appendix 2.6 to Schedule 4).

8. Responsibilities of TTL

8.1 TTL undertakes in favour of each Operator:-

- (a) to ensure that the PAYG System (together, where required, with the provision of the TTL Services) will deliver, support and enable the items, functions and facilities described in paragraphs 1, 2 and (to the extent provided therein) 3 of Schedule 2 from the relevant Operator Launch Date (save to the extent that the Parties agree otherwise pursuant to paragraph 3.3 of Schedule 13 and subject to paragraph (i) of Schedule 2);
- (b) that it will use its reasonable endeavours to ensure that the requirements set out in Clause 8.1 (a) are achieved by no later than the Long Stop Date and will in any event be liable to the extent provided in paragraph 5 of Schedule 13 if those requirements are not achieved by that date. TTL's obligation to achieve such date is subject to each Operator and ATOC providing such information reasonably requested by TTL from time to time in a timely and accurate manner to allow the requisite processes to be identified;
- (c) that:

- (i) in relation to the PAYG System to be implemented with effect from the Operator Launch Date, all PAYG functionality and facilities affecting the Operators including the items referred to in Clause 8.1(a) will be tested:
 - (1) by way of factory acceptance tests;
 - (2) in a suitable test environment that sufficiently replicates the conditions and business rules applicable on the Operators' Services (which it is anticipated will usually take place on or at suitable Operator Stations); and
 - (3) in accordance with the test plan(s) to be agreed under Schedule 13; and
- (ii) in relation to any updated system or software elements of the PAYG System which are implemented after the Operator Launch Date via the Change Control Procedure or otherwise in accordance with this Agreement, all functionality and facilities affecting the Operator's networks will be adequately tested prior to such implementation; and
- (d) to ensure that the testing undertaken pursuant to Clause 8.1 (c) above does not have any adverse operational impact on the Operator (including an Operational Impact) except:-
 - (i) to the extent anticipated by or necessarily resulting from the test plan agreed pursuant to paragraph 2.2(c) of Schedule 13;
 - (ii) nothing in this Clause 8.1(d) shall prevent TTL from being able to undertake the work referred to in paragraph 2.8 of Schedule 13, on the basis set out in that paragraph; and
 - (iii) nothing in this Clause 8.1(d) shall prevent TTL from being able to implement a Required Change, subject always to the provisions of Schedule 9.

8.2 TTL shall provide a PAYG retail network of not less than 3800 outlets, with broadly the geographic coverage as at 1 January 2008 until 1 January 2011 and thereafter shall give 12 months prior notice of any significant change in the number or distribution of outlets. The geographic coverage as at 1 January 2008 is as set out in Schedule 20. TTL shall, if and when reasonably requested from time to time by ATOC, provide an update to that document or other evidence reasonably required to demonstrate that it is complying with its obligations under this Clause.

- 8.3 As between TTL and the Operators, and without limiting the Operators' obligations under this Agreement or TTL's obligations under the Amended Clearance Agreement, TTL shall have: -
- (a) responsibility and liability for the financial operation of PAYG including the debtor/creditor relationship with holders of TTL Smartmedia in relation to which TTL holds a PAYG Balance; and
 - (b) sole responsibility for the supply and management of TTL Smartmedia for PAYG passengers' use, including but not limited to card management and associated customer relationship management.
- 8.4 TTL undertakes that no aspect of PAYG or the PAYG System will restrict the ability of an Operator to use other ticketing, payment or gate systems, or oblige them to enter into any supply agreements other than this Agreement, the Implementation Agreement (if applicable) and the Services Agreement but for the avoidance of doubt
- (a) nothing in this Clause 8.4 shall: -
 - (i) be deemed to imply that any such alternative systems will be at equal or lesser cost to the Operators than the systems in conjunction with which the PAYG System is used at the date of this Agreement;
 - (ii) relieve an Operator of its obligations under this Agreement or a Services Agreement in respect of maintenance of its ticket gates or other equipment or systems for which it is responsible.
 - (b) it is acknowledged that if the Operator wishes to exercise the option to retail PAYG Value Added referred to in Clause 12 and Schedule 8, then the Operator will be responsible for entering into such agreements: -
 - (i) with TTL as are anticipated by Schedule 8; and
 - (ii) with third parties as may otherwise be required in connection therewith.
- 8.5 TTL shall use all reasonable endeavours to encourage the development of an open market in the supply of PAYG compatible devices, gates and ticketing systems and will review progress of such development at the Contract Management Board meetings (in accordance with the provisions of Schedule 19), as and when appropriate.
- 8.6 On or as soon as reasonably practicable following the PAYG Launch Date TTL undertakes that TTL Smartmedia and PAYG publicity material will display the double arrow prominently alongside the TfL roundel: -
- (a) if and for so long as each and all of the parties included from time to time within the definition of "Operators" under and for the purpose of the Travelcard Agreement (or such other

agreement as the Parties may agree for this purpose has replaced the Travelcard Agreement), are also party to this Agreement as Operators; and

- (b) subject to the Operators procuring for TTL free of charge any required permissions in respect of such use.

8.7 Except as expressly set out otherwise in this Agreement, TTL shall bear all its costs in fulfilling its responsibilities under this Agreement without prejudice to:-

- (a) payment by each Operator of the TTL Charges in respect of the TTL Services rendered to it; and
- (b) each Operator's obligations to bear its own costs in fulfilling its own obligations under this Agreement, its Implementation Agreement (if any) and its Services Agreement.

8.8 TTL warrants that any PAYG Equipment to be provided by TTL to Operators pursuant to this Agreement will be equipment which performs materially in the same way in which, and with a minimum of the same functional output in all material respects as, similar equipment provided by the Ticketing Services Provider to TTL as at the date of this Agreement performs as at the date of this Agreement ("the Baseline Standard") Provided that:-

- (a) the Operators acknowledge that subject always to Clause 8.8(b) and subject to TTL going through the Change Control Procedure (where it applies), where after the date of this Agreement there is any modification to the PAYG Equipment, TTL shall not be prevented by this Clause 8.8 from providing PAYG Equipment whose standard of performance is different but not worse than the Baseline Standard; and
- (b) where after the date of this Agreement:-
 - (i) the Ticketing Services Provider provides to TTL PAYG Equipment which performs at a standard higher than the Baseline Standard; and
 - (ii) either:-
 - (1) there is no additional cost to TTL associated with such higher standard (other than a cost which TTL is required to bear pursuant to the operation of the Change Control Procedure); or
 - (2) the Operators have contributed to such cost (whether through the operation of the Change Control Procedure or through an increase in the relevant costs being included for the purpose of calculating the TTL Charges under Schedule 4 or otherwise)

then thereafter any PAYG Equipment to be provided by TTL to Operators pursuant to this Agreement will be equipment which performs to such higher standard (and, for the avoidance of doubt, with the Baseline Standard).

8.9 TTL undertakes to consult promptly with the Operators on the details and progress of the technical work to:

- (a) incorporate the Key Features set out in Schedule 2 into the PAYG System; and
- (b) implement any changes made pursuant to Clause 17.2.

8.10 The following provisions shall apply in respect of Gate Passes: -

- (a) TTL undertakes that, subject to Clause 8.10(c), TTL will provide an initial supply of Gate Passes free of charge to each Operator prior to PAYG Launch as follows: -
 - (i) 2 Gate Passes for each non-gated Operator Station; and
 - (ii) for each gated Operator Station, 1 Gate Pass per "duty" together with 2 spares for each such Station (where "duty" means the maximum number of members of Operator staff with responsibility for manning gatelines at any one time); and
 - (iii) for each member of mobile Revenue Protection staff, 1 Gate Pass (on the basis, for the avoidance of doubt, that station based staff on gateline duty at gated Operator Stations (as described in (ii) above) are not Revenue Protection staff for this purpose)

and for the purpose of this Clause 8.10 "Gate Pass" means an item of TTL Smartmedia suitably encoded to test that a PAYG reader device is operating (and in the case of a Gate Reader, to open the gate).

- (b) Subject to Clause 8.10(d), TTL will supply additional Gate Passes in response to requests from Operators from time to time on the basis that:-
 - (i) the Operator will be responsible for bearing the cost of such additional Gate Passes;
 - (ii) the provisions of Part III of Schedule 4 shall apply (mutatis mutandis) to the procurement and provision of such additional Gate Passes as if the same were TTL Services;
 - (iii) TTL will use all reasonable endeavours to comply with the Operator's timescales in relation to the supply of the additional Gate Passes.
- (c) The supply of Gate Passes pursuant to Clauses 8.10(a), (b) and (d) shall be subject to the following conditions:-

- (i) the Operator must sign a receipt for each such Gate Pass (such receipt to be in the form utilised by TTL immediately prior to the date of this Agreement or such other form as may be agreed from time to time);
 - (ii) TTL will monitor usage of such Gate Passes and report on such usage to the applicable Operator;
 - (iii) TTL shall notify the Operator of any significant suspected misuse (via the monitoring report or otherwise). TTL reserves the right to stop any Gate Pass if, in TTL's reasonable opinion, such Gate Pass is being significantly misused, and the Operator, having been so notified, has not rectified that significant misuse to TTL's reasonable satisfaction.
- (d) TTL will replace any Gate Pass issued pursuant to Clause 8.10(a) of this Clause 8.10(d) free of charge on the expiry of such Gate Pass, subject to:-
- (i) there being evidence that the Gate Pass being replaced has been used for the purpose supplied (being to check that Validators and Gate Readers are working, and in the case of a gated Operator Station to assist passengers in appropriate situations to go through a gate); and
 - (ii) there being no evidence of any significant misuse of the Gate Pass (or any such misuse has been rectified by the Operator to TTL's satisfaction pursuant to Clause 8(c)(iii)

in each case as indicated by the monitoring reports issued by TTL pursuant to Clause 8.10(c)(ii).

9. Responsibilities of the Operators

9.1 Each Operator shall:-

- (a) maintain its membership of the Scheme during the continuance of this Agreement;
- (b) provide adequate resources for the testing and launch of PAYG on its Operator's Services in accordance with its obligations under paragraph 2.2 (c) of Schedule 13;
- (c) provide in a timely manner such information as is required to be provided by the Operator in accordance with the provisions of this Agreement in order to enable TTL to comply with its obligations under this Agreement;
- (d) without prejudice to any other obligations the Operator may have under this Agreement or any Services Agreement, from the Operator Launch Date use all reasonable endeavours to:

- (i) ensure that the PAYG Equipment at its Operator Stations is available for customer use at all times during that Operator's Traffic Day, including ensuring that all PAYG Equipment is powered, free from grime, graffiti and obstructions; and
 - (ii) report expeditiously to TTL on any PAYG Equipment faults and non-availability and any disruptive events which may be having an impact on PAYG users' ability to make Complete Journeys;
- (e) develop and implement as necessary before its Operator Launch Date, appropriate operating procedures for how Extension Permits will work for customers of the Operator's Services post its Operator Launch Date.

10. Revenue and Payment

- 10.1 With effect from the PAYG Launch Date (and subject to paragraph 3.3 of Schedule 13) PAYG Value Expended by Passengers will be allocated between TTL and the Operators who have achieved Operator Launch based upon the Passenger Transport Service(s) used. Subject to Clause 16.8, the procedures for allocation are set out in Schedule 7 (PAYG Revenue Allocation) in order to calculate sums due under the Amended Clearance Agreement.
- 10.2 TTL will settle net PAYG revenues due to the Operators who have achieved Operator Launch and, for so long as the London Overground Operator is to receive settlement via RSP, to any London Overground Operator (taking into account in each case receipts of PAYG Value Added retailed by them) in accordance with the Amended Clearance Agreement. TTL will make an aggregate settlement of all sums due to such Operators and any London Overground Operator to RSP who will be responsible for making allocations between such Operators and any London Overground Operator.
- 10.3 TTL will make available all information required by the Amended Clearance Agreement in accordance with its terms.
- 10.4 The following provisions shall apply in respect of RSP:-
- (a) The Operators will ensure the continued existence of RSP (or a suitable alternative) to enable the settlement of payments by TTL in accordance with Clauses 10.1 and 10.2 during the term of this Agreement.
 - (b) TTL shall not be deemed to be in breach of this Agreement where TTL's breach is due to a breach of Clause 10.4(a) by any or all of the Operators.

11. Commission

- 11.1 Each Operator shall pay TTL Commission in respect of PAYG Value Expended by passengers on that Operator's Services and allocated to the Operator in accordance with Clause 10 (and subject to Clause 11.2) at the following rate:-

- (a) if and for so long as an Operator offers a Minimum Retail Service, the rate payable by that Operator is 1.5%; and
- (b) where Clause 11.1(a) does not apply, 2.5%

in each case provided that: -

- (i) subject to (ii) below, the rate in (a) will apply for the first 6 months from an Operator's Launch Date, even if the Operator is not offering a Minimum Retail Service if, by no later than the Operator Launch Date, the relevant Operator notifies TTL that the Operator is making the necessary arrangements to implement and commence a Minimum Retail Service within 6 months from the Operator's Launch Date and
- (ii) if (i) above applies and the Operator is not offering a Minimum Retail Service by the expiry of 6 months from the Operator's Launch Date, then TTL shall be entitled to apply the rate in (b) with effect from the Operator's Launch Date until such time as the Operator is offering a Minimum Retail Service, and to require the appropriate reconciliation payment to be made in respect of the period from the Operator's Launch Date, to give effect to this paragraph (ii) and the corresponding rate change triggered for the purposes of paragraph 5 of Schedule 8.

11.2 Commission Changes

- (a) If an Operator offers a Minimum Retail Service at the date of PAYG Launch, that Operator shall have the option either: -
 - (i) to pay and receive commission at the rates described in Clause 11.1(a) and Schedule 8 paragraph 5.2 respectively; or
 - (ii) as an alternative to the rates described in Clause 11.1(a) and Schedule 8 paragraph 5.2, to elect to pay and receive commission at the rates described in Clause 11.1(b) and Schedule 8 paragraph 5.3 respectively, in consideration for agreeing to pay the rate set out in Clause 11.1(b), instead of paying the rate set out in Clause 11.1 (a)from PAYG Launch, by giving TTL at least 30 day's written notice of its election prior to PAYG Launch.
- (b) At any time whilst an Operator offers a Minimum Retail Service that Operator (including, for the avoidance of doubt, any Operators who have already made an initial election under Clause 11.2 (a)), shall, in accordance with Clause 11.2 (c), have the option either: -
 - (i) to pay and receive commission at the rates described in Clause 11.1(a) and Schedule 8 paragraph 5.2 respectively; or

- (ii) as an alternative to the rates described in Clause 11.1(a) and Schedule 8 paragraph 5.2, to elect to pay and receive commission at the rates described in Clause 11.1(b) and Schedule 8 paragraph 5.3 respectively, in consideration for agreeing to pay the rate set out in Clause 11.1(b), instead of paying the rate set out in Clause 11.1 (a).
 - (c) An Operator shall be entitled to exercise the option described in Clause 11.2(b) to change the rate of commission being received and paid from time to time by giving not less than 30 days prior written notice to TTL a maximum of twice a year, expiring on 30 June and/or 31 December, as applicable.
 - (d) If an Operator is not able to offer a Minimum Retail Service as a direct result of a breach of this Agreement by TTL, then that Operator will be deemed to offer a Minimum Retail Service for the purposes of this Clause 11.
- 11.3 The mechanism for the deduction of any Commission payable to TTL from the payments due to RSP (pursuant to Clause 10.2) in respect of the revenues due to the Operators and any London Overground Operator in respect of PAYG is dealt with under the Amended Clearance Agreement.
- 11.4 The Parties acknowledge that the Commission payable above shall represent and be the only charges payable by an Operator to TTL under this Agreement in respect of the Operator's use of TTL's retail network in respect of PAYG.
- 11.5 The Parties acknowledge that the Commission rates set out in Clause 11.1 and Schedule 8 paragraphs 5.2 and 5.3 of this Agreement include provisions to compensate the Parties for the loss of interest by each Party in respect of ticket sales made by it that might otherwise accrue between the date of sale and the date of settlement between TTL and RSP, a period of 6 weeks on average. This compensation has taken the form of a reduction in the commission rate of 0.5 percent to the rates originally discussed by the Parties, to produce the rates now set out in Clause 11.1. This reduction equates to a 6.5% annual rate of interest. If at any time in the future the base rate of the Bank of England exceeds 9% for two or more consecutive months, the Parties agree to review alternative Commission rates to those set out in this Agreement in order to maintain a comparable level of compensation to the Parties.
- 12. **Retailing Option**
- 12.1 TTL agrees that the Operators shall each have the option to retail PAYG Value Added and/or TTL Smartmedia. The detailed terms of this option including commission arrangements are set out in Schedule 8 (Retailing).
- 13. **Stations Outside the PAYG Area**
- 13.1 Each Operator shall have the option of using PAYG at stations outside the PAYG Area:

- (a) subject to the basis for so doing being agreed between the Operator and TTL and approved by the Secretary of State; and
 - (b) provided always that the exercise of such option does not result in any adverse effect on any Operator's costs or obligations.
- 13.2 TTL shall have the option of using PAYG at stations outside the PAYG Area subject to the basis for so doing being approved by the Secretary of State.
- 13.3 No extension of PAYG shall include stations outside the PAYG Area until the provisions of Schedule 16 have been implemented.
- 14. **Conditions of Carriage**
- 14.1 TTL Conditions of Carriage will apply to the sale and holding of PAYG Balances and TTL Smartmedia.
- 14.2 The Conditions of Carriage of the carrier providing the Passenger Transport Services in respect of which PAYG is used shall apply to that PAYG usage by the passenger.
- 14.3 Each of the Operators and TTL shall use reasonable endeavours to ensure that its Conditions of Carriage shall not prevent, inhibit or otherwise restrict the use of PAYG in accordance with, or otherwise contradict, the provisions set out in this Agreement.
- 14.4 If any Party raises an issue that there may be an inconsistency or potential inconsistency between the Conditions of Carriage of the Parties, the Parties will use reasonable endeavours to resolve those inconsistencies wherever possible, insofar as this is necessary properly to implement the provisions of this Agreement.
- 15. **Operators' Limitation of Liability**
- 15.1 Subject always to Clause 15.4 and 15.5, each individual Operator's aggregate liability to TTL arising from all breaches by that Operator of this Agreement (including, but not limited to, the negligent performance of any of its obligations hereunder), the Services Agreement and any Implementation Agreement after the PAYG Launch Date shall be limited in respect of all loss and damage to:
 - (a) £2 million (as that sum is indexed in accordance with Clause 15.3) in respect of all liabilities arising in respect of the 5 year period commencing on the PAYG Launch Date; and
 - (b) £2.5 million (as that sum is indexed in accordance with Clause 15.3) in respect of all liabilities arising in respect of the next following 5 year period; and
 - (c) £3 million (as that sum is indexed in accordance with Clause 15.3) in respect of all liabilities arising in respect of each subsequent 5 year period during the term of this Agreement.

For the avoidance of doubt, "PAYG Launch Date" includes for this purpose the PAYG Launch Date triggered by a partial launch of PAYG pursuant to paragraph 3.3 of Schedule 13.

15.2 For the avoidance of doubt, the limit of liability applicable to any 5 year period under Clause 15.1 will not be reduced in respect of an individual Operator if the Operator: -

(a) becomes a Party to this Agreement after the commencement of; or

(b) ceases to be a Party prior to the expiry of,

the 5 year period in respect of which the limit of liability applies.

15.3 For the purpose of this Clause 15, each limit of liability amount stated in Clause 15.1 (as such amount is remaining after any successful claims made pursuant to this Agreement) shall be adjusted annually on each anniversary of the date of signature of this Agreement in accordance with the following formula: -

New limit of liability amount = limit amount stated in Clause 15.1 x $\frac{RPI2}{RPI1}$

where: -

RPI1 is the value of the Retail Prices Index published for the month of June 2008; and

RPI2 is the value of the Retail Prices Index published for the month of June which most recently precedes the relevant anniversary of the date of signature.

15.4 Each individual Operator does not exclude or limit their liability (if any) to TTL:

(a) for personal injury or death resulting from the Operator's negligence;

(b) for any liability arising under Clauses 6.1, 6.2, 6.3(c)(v), 6.4 and 6.5 or Schedule 10 paragraph 5(g)(i), including as such Clauses apply in the Services Agreement and the Implementation Agreement;

(c) for any liability arising under Clause 24 (Confidentiality), or Clause 15 of the Services Agreement or any equivalent Clause relating to confidentiality in the Implementation Agreement,;

(d) for any liability arising under Clause 32 (Protection of Personal Data) or Clause 16 of the Services Agreement or any equivalent Clause relating to data protection in the Implementation Agreement;

(e) for any matter for which it would be illegal for the Operator to exclude or limit or to attempt to exclude or limit its liability;

- (f) for fraud by the Operator or any of its employees agents or subcontractors;
- (g) for breach of an obligation to make a payment of charges or payments of any kind accrued under this Agreement, its Services Agreement, or its Implementation Agreement (as applicable) including, without limitation, TTL Charges and commission;
- (h) in respect of all and any loss of or damage to tangible property (whether such tangible property belongs to TTL or a third party) including without limitation the PAYG Equipment; or
- (i) in respect of all and any loss arising from the misappropriation or alienation of the PAYG Equipment (which includes, without limitation, any breach of Schedule 14).

15.5 Clause 15.1 shall not apply in respect of any liability of the Operators pursuant to paragraph 5.2 and /or 5.3 of Schedule 13.

16. TTL Indemnity, Liability and Financial Losses

16.1 Subject to Clauses 16.2 to 16.7 and paragraph 5 of Schedule 13, TTL shall indemnify each Operator against such of the following costs and losses as are agreed (or determined pursuant to the mediation and arbitration process in Clause 22 in the event of disagreement) as having been incurred by that Operator:-

- (a) costs and losses of the Operator arising from delays, failures or errors:-
 - (i) in, or in the operation of, the PAYG System after the Operator's Operator Launch Date; or
 - (ii) in the provision of the TTL Services

(including any successful claim against an Operator from a third party arising out of such a delay, failure or error);
- (b) any costs and losses of the Operator arising out of any successful claims from third parties resulting from infringement of Intellectual Property Rights where such infringement has arisen from the Operator's use of PAYG by the Operator as permitted by this Agreement;
- (c) any costs and losses of the Operator arising out of any successful claim against an Operator by a third party arising directly from the creation, issuing and/or management of PAYG Balances and PAYG Value Added;
- (d) any costs and losses of the Operator arising out of any successful claim against an Operator by a third party arising as a direct result of the issuance or management of TTL Smartmedia;

- (e) any costs reasonably incurred by the Operator as a result of PAYG becoming regulated by the Financial Services Authority or any successor or other similar financial regulatory body (and for this purpose it is accepted that neither ORR nor any other rail industry regulatory body is or will be regarded as a similar financial regulatory body);
 - (f) any other costs and losses of the Operator caused by a breach by TTL of its obligations, or of any warranties or undertakings given by TTL, under this Agreement;
 - (g) losses caused by any loss of functionality (which includes, without limitation, loss of Oyster, ITSO, Magnetic, Barcode and gate functionality) prior to an Operator's Operator Launch Date of: -
 - (i) without limiting Clause 16.1(g)(ii):-
 - (1) the Operator's gate lines, if and to the extent they arise from any TTL negligence (or any negligence of any sub-contractor or agent of TTL acting in its capacity as a sub-contractor or agent in relation to the subject matter of this Agreement) or breach by TTL of this Agreement or the Operator's Implementation Agreement;
 - (2) the gate line at any other Operator's station, if and to the extent they arise from any TTL negligence (or any negligence of any sub-contractor or agent of TTL acting in its capacity as a sub-contractor or agent in relation to the subject matter of this Agreement) or breach by TTL of this Agreement or any implementation agreement entered into between TTL and that other Operator pursuant to this Agreement; and
 - (ii) the Operator's gate lines or the gate line at any other Operator's Operator Station either: -
 - (1) during peak hours (as such is defined in paragraph 2.8 of Schedule 13); or
 - (2) outside of any down time agreed between the Operator and TTL pursuant to paragraph 2.8 of Schedule 13
- if and to the extent that such loss of functionality is caused by any act or omission (and not just any breach or negligence) of TTL (or any act or omission of any sub-contractor or agent of TTL acting in its capacity as a sub-contractor or agent in relation to the subject matter of this Agreement).

16.2 Operator Responsibilities

- (a) Each Operator agrees to notify TTL in writing as soon as reasonably practicable of any event of which it becomes aware which will or may lead to a claim under Clause 16.1, and in any event it shall be a condition of an Operator's entitlement to any indemnity from TTL under Clause 16.1 that such notification shall be given within 3 months from when the Operator knew, or ought reasonably to have known of any such event.
- (b) Each Operator shall take all reasonable steps to avoid any costs, losses and /or claims (including those which may arise as a consequence of contracts entered into by the Operator with third parties) and mitigate the same when arising..
- (c) TTL shall not be liable for and shall not indemnify each Operator for any loss or claim to the extent such loss or claim is caused, or contributed to, by: -
 - (i) any breach of or negligent performance by the Operator (or its employees or agents) of its obligations under this Agreement (or any other agreement between TTL and the Operator); or
 - (ii) any other tortious (including negligent) act or omission or breach of statutory duty by the Operator or its employees or agents (including for the avoidance of doubt where such act or omission or breach of statutory duty is in relation to the Operator's passengers or any other party) as such is relevant to TTL's liability under this Agreement (or any other agreement between TTL and the Operator).

16.3 An Operator shall not unreasonably refuse or delay permission (where and to the extent that such permission is required) for TTL to take steps reasonably required in order to remedy any breach of TTL's obligations under this Agreement (or if the breach is incapable of remedy, to take steps reasonably required to prevent the continuation or recurrence of the breach). If:

- (a) an Operator does so unreasonably refuse or delay; and
- (b) TTL's liability to the Operator would have been reduced if the Operator had not so unreasonably refused or delayed then

without prejudice to any other rights of TTL, TTL shall be relieved of liability to the Operator to the extent that TTL's liability to the Operator would have been reduced if the Operator had not so unreasonably refused or delayed permission.

16.4 Each Operator will provide on request such information and assistance in relation to the subject matter of its claim for indemnity as TTL reasonably requests.

16.5 With respect to any third party claim in respect of which an Operator is seeking to make TTL liable and/or seeking an indemnity from TTL: -

- (a) the Operator shall not make any settlement, compromise or prejudicial admission in relation to such claim without the prior written consent of TTL (such consent not to be unreasonably withheld or delayed);
 - (b) TTL shall at its own cost and expense be entitled to control the defence of such claim and any related proceedings and settlement negotiations; and
 - (c) at the cost and expense of TTL, the Operator shall take all reasonable steps to cooperate with TTL in the defence or settlement of such claim.
- 16.6 TTL shall act promptly in settlement of any claim which becomes due and payable to an Operator under this Clause 16.
- 16.7 TTL's indemnity under Clause 16.1 shall not extend to, and TTL shall not be liable to an Operator in respect of, liabilities incurred by an Operator arising from the delay or cancellation of trains except to the extent that any such delay or cancellation arises as a result of TTL's negligence, breach or default in respect of its obligations under this Agreement, or under the Operator's Services Agreement, or Implementation Agreement (if any).
- 16.8 The Parties acknowledge and agree that:-
- (a) the apportionment methodology from the PAYG Launch Date would be in accordance with the provisions of Schedule 16 ("the Schedule 16 Methodology") but the PAYG System will be unable to support the Schedule 16 Methodology from the PAYG Launch Date;
 - (b) TTL will develop the PAYG System to enable revenue to be apportioned on the basis of the Schedule 16 Methodology;
 - (c) when TTL has developed the PAYG System to support the Schedule 16 Methodology, and demonstrated this to the Operators' reasonable satisfaction, TTL will notify the Operators of the date ("the Schedule 16 Commencement Date") from which the functionality so developed and demonstrated will be implemented. On and from the Schedule 16 Commencement Date, the Parties shall adopt the Schedule 16 Methodology and Schedule 16 shall supersede paragraphs 1.2 and 1.3 of Part 2 of Schedule 7. The Operators will not unreasonably withhold or delay confirmation that the ability of the PAYG System to support the Schedule 16 Methodology has been demonstrated. The Parties shall not be required to instigate or follow the Change Control Procedure in respect of the development of the PAYG System by TTL pursuant to this Clause 16.8;
 - (d) prior to the Schedule 16 Commencement Date, where and to the extent that the Operators can establish that switching by passengers into PAYG from One Day Travelcards results in a switch in revenue to TTL from the Operators collectively

compared to the revenue that the Parties would have received had passengers not switched from One Day Travelcards, TTL will (via RSP) reimburse ATOC (on behalf of the Operators) the amount of that net reduction in revenue, provided that TTL shall have no such liability to the extent that such reduction arises out of an Operator's own acts or omissions.

16.9 For the avoidance of doubt:-

- (a) TTL shall not be liable to an Operator in respect of any breach of its obligations under this Agreement to the extent that such breach is attributable to any breach by that Operator of its obligations under this Agreement, the Services Agreement or the Implementation Agreement (if any); and
- (b) an Operator shall not be liable to TTL in respect of any breach of its obligations under this Agreement to the extent that such breach is attributable to any breach by TTL of its obligations under this Agreement, the Services Agreement or the Implementation Agreement (if any).

16.10 Where

- (a) an Operator (in this Clause 16.10, "the Claimant Operator"):-
 - (i) alleges that TTL is in breach of its obligations under this Agreement or that Operator's Implementation Agreement or Services Agreement; or
 - (ii) gives notice of a claim under Clause 16.1; or
 - (iii) otherwise seeks to make TTL liable under or in connection with this Agreement, or Implementation Agreement or Services Agreement; and
- (b) TTL acting in good faith gives the Operator notice that TTL considers in its reasonable opinion that any such breach, claim or other liability is:-
 - (i) attributable wholly or partly to a breach by one or more other Operators of this Agreement or an Implementation Agreement or a Services Agreement; or
 - (ii) one in respect of which one or more other Operators is liable to indemnify TTL under a Pearl Device Agreement ("an Indemnified Liability")

(in this Clause 16.10, each such other Operator being a "Defendant Operator")

then:-

- (1) the matter shall be referred for resolution in accordance with Clause 22 on the basis that each of the Claimant Operator, the Defendant Operator(s) and TTL shall be a party to that dispute;

- (2) TTL shall not be liable to compensate or pay the Claimant Operator to the extent of any amount which TTL alleges is (i) attributable to the breach of a Defendant Operator, or (ii) an Indemnified Liability until the fact of the Defendant Operator's breach, and the extent of the amount which is so attributable and/or the extent of the Defendant Operator's liability in respect of the Indemnified Liability, is agreed or determined;
- (3) subject to paragraph (5) each of TTL and any Defendant Operator agrees that it shall make a payment to the Claimant Operator of any amount which TTL or the Defendant Operator (acting reasonably and in good faith) does not dispute. Such payment shall be:-
 - (i) net of any amount which the payer (acting reasonably and in good faith) considers is attributable to the breach or default of another Party (and, where TfL is the payer, any Indemnified Liability); and
 - (ii) on account of the payer's ultimate liability, as finally agreed or determined;
- (4) if and to the extent that it is finally agreed or determined that TTL is liable to the Claimant Operator and such liability is attributable to a breach by a Defendant Operator and/or is in respect of an Indemnified Liability, TTL's liability to the Claimant Operator is limited to paying to the Claimant Operator such amount as the Defendant Operator is liable to pay (having regard to any payments on account made pursuant to paragraph 3 above and any limitations on the Defendant Operator's liability) and has paid to TTL in respect of such breach or Indemnified Liability;
- (5) if TTL (acting reasonably and in good faith) considers the total amount which is attributable to the breach or default of one or more Defendant Operators and/or any Indemnified Liability is (in aggregate) less than £50,000, then unless otherwise agreed:-
 - (i) the on account payment referred to in paragraph (3) shall be made by TTL only and shall include payment by TTL of the amount which TTL so considers to be attributable to each Defendant Operator except to the extent that TTL considers (acting reasonably and in good faith) that such amount, when added to the Defendant Operator's other liabilities, will or may result in the limit of the Defendant Operator's liability to TTL being exceeded;
 - (ii) such payment shall not relieve a Defendant Operator of any liability; and
 - (iii) if it is finally agreed or determined that a Defendant Operator is liable for any amount in respect of which TTL has made a payment on account under this paragraph (5) then the reconciliation payments referred to in paragraph (3) will include both a) reimbursement by the Claimant Operator to TTL of that amount and b) an interest payment

from the Defendant Operator to TTL on that amount for the period between the date of the on account payment and the date of reimbursement to TTL at 4% above the base rate of the Bank of England.

17. Change Procedure

17.1 No change may be made to this Agreement, its Schedules or the Implementation Agreement or Services Agreement by TTL or an Operator without the prior written consent of the other except as otherwise provided in this Agreement, the Implementation Agreement or Services Agreement.

17.2 Where

- (a) an Operator proposes a change to the PAYG System or TTL Services; or
- (b) subject to Clause 17.4, TTL proposes a change to (1) the PAYG System; or (2) the TTL Services which would result in either: -
 - (i) a non compliance with the functions, facilities or outputs specified in and required by Schedules 2, 4, 5, 7 and 16 of the Agreement or the Amended Clearance Agreement (the "Protected Requirements"): or
 - (ii) would otherwise have any operational impact (including but not limited to any Operational Impact) on the Operators

then subject (in the case of emergency remedial work required to be carried out to secure the continued operation of the PAYG System) to Clause 17.5, the Change Control Procedure will apply to such proposals except where a specific provision of this Agreement, the Implementation or Services Agreements provides otherwise.

17.3 TTL shall be entitled to make a change to the PAYG System, without the Operators consent and without going through the Change Control Procedure set out in Schedule 9, provided such change does not:-

- (a) result in a non compliance with the Protected Requirements; or
- (b) otherwise have any operational impact (including but not limited to any Operational Impact) on the Operators

and TTL will provide a summary update to the relevant Operators in relation to any such changes at the applicable Services Delivery Group meetings (in accordance with the provisions of Schedule 19), and thereafter provide such further information in respect thereof as the Operators may reasonably require.

17.4 For the avoidance of doubt and except in the case of emergency remedial work required to be carried out to secure the continued operation of the

PAYG System pursuant to Clause 17.5, a change in the (1) PAYG System or (2) the TTL Services which:-

- (a) results in a non compliance with the Protected Requirements;
or
- (b) otherwise has an Operational Impact

shall require the Operators' consent and shall not be capable of change by way of the Required Change procedure set out in Schedule 9. Such consent in these circumstances shall be at the Operators' discretion, and therefore any refusal to give consent shall not be the subject of mediation or arbitration in accordance with Clause 22.

17.5 Maintenance

Work required to carry out any maintenance and support, emergency remedial work or rectification of defects or failures in the PAYG System may be carried out without the Operators' prior consent or the application of the Change Control Procedure subject to notification in accordance with this Clause to the affected Operators and to ATOC as soon as reasonably practicable of the happening of any such maintenance and support, emergency remedial or rectification work if:-

- (a) it has or is likely to have an adverse Operational Impact;
and
- (b) the work is to be undertaken outside the Maintenance Window (where it is work affecting the central data processing system) or Engineering Hours (where it is work affecting any item of PAYG Equipment) or outside any other downtime agreed by the Parties.

The notification is to include the nature of the problem, details of the work undertaken or to be undertaken and the anticipated Operational Impact and will be on the following basis:

- (i) these will be given directly to the Operators (notwithstanding Clauses 4 and 28);
- (ii) each Operator will give to TTL the relevant contact numbers for receipt of such notices (including "out of hours" contact email addresses and phone numbers);
- (iii) such notices may be given by e-mail or verbally by phone;
and
- (iv) TTL will not be responsible for notice not being given prior to commencement of work where, having attempted to give prior notice using the contact details provided by the Operator, it is unable to make contact with the Operator prior to the work going ahead, but this shall not relieve TTL of its obligation to give subsequent notice to the Operator (with a copy to ATOC).

17.6 Where TTL undertakes any maintenance and support, emergency remedial work or rectification under Clause 17.5, or any work under Clause 17.3, and any Operator considers that the same has caused a change to the PAYG System which has resulted in a non compliance with the Protected Requirements or has otherwise had an operational impact (including but not limited to any Operational Impact) on the Operators, then:-

- (a) the relevant Operator shall notify TTL within 30 days of becoming aware of the same; and
- (b) if it is agreed or determined that there has been such a change then the relevant Operator will be entitled to:
 - (i) require restoration of any affected Protected Requirements and reversal of any Operational Impact; and
 - (ii) be compensated by TTL as if such change were a Required Change (such compensation to be in respect of the period until the restoration or reversal takes place).

17.7 TTL will:

- (a) use all reasonable endeavours to carry out any work on the PAYG System in a way which minimises disruption to the Operators' operations. The degree of endeavours will be no less than TTL uses to avoid disruption to its own operations; and
- (b) in particular, use all reasonable endeavours to ensure that work which will impact an Operator's operations is undertaken during the Maintenance Window or Engineering Hours (as the case may be) or during other planned downtime agreed with the Operators.

17.8 Nothing in this Clause shall relieve TTL of its liability under the indemnity provisions in Clause 16 for costs or losses suffered by Operators caused by a breach of TTL's obligations which it was seeking to remedy.

17.9 Without prejudice to Clause 17.8, TTL will not be liable for non-availability of the PAYG System (or components of it) as follows:-

- (a) in respect of the central data processing system within the PAYG System, during the Maintenance Window;
- (b) in respect of any item of the PAYG Equipment, during Engineering Hours;
- (c) where that non-availability is a consequence of and consistent with the performance of the TTL Services in accordance with the terms of the Services Agreement; or
- (d) during any other period of downtime for the PAYG System agreed between TTL and the Operators.

17.10 For the purposes of this Clause, "*EMV Standard*" means a set of operating and security standards for smartmedia used for payment transactions, defined by the banking industry through EMVCo LLC.

The Parties acknowledge that they are considering the acceptance of contactless smartmedia based on the EMV Standard for the payment of passenger fares for rail transport, and agree: -

- (a) to share relevant research and analysis where this does not breach confidentiality agreements with third parties;
- (b) to co-operate to discuss and develop the technical requirements and business model for the acceptance of such contactless smartmedia on rail;
- (c) to establish a Future Ticketing Working Group (FTWG) that meets regularly and to provide representatives to attend meetings of the FTWG; and
- (d) subject to each Party being satisfied with the outcome of their co-operation in respect of the technical requirements and business model, to negotiate in good faith in the FTWG to develop a plan for the joint implementation of such acceptance, with (i) defined roles and commitments and an agreed sharing of costs, consistent with and subject to an agreed business model; (ii) an agreed procurement strategy including requirements or options specified by any Operator(s); and (iii) identification and agreement of any consequential changes to the PAYG Agreement.

Any such co-operation or joint implementation shall be subject to consent and/or direction by the Secretary of State to the extent that the same is required by the Operators.

For the avoidance of doubt: -

- (i) each Party shall have the right to use any shared material independently and to implement smartmedia compliant with the EMV Standard on its own networks independently;
- (ii) no Party shall be obliged to accept smartmedia compliant with the EMV Standard on its network;
- (iii) the introduction of smartmedia compliant with the EMV Standard on any or all Operators' Services shall not be capable of constituting a Required Change under this Agreement; and
- (iv) the Operators shall not be entitled pursuant to Change Control Procedure, to require TTL to agree to implement smartmedia compliant with the EMV Standard on any or all Operators' Services.

18. Termination

18.1 This Agreement may be terminated: -

- (a) by TTL giving to ATOC at least 24 months prior notice in writing provided that no such notice shall take effect before 1 September 2017;
- (b) pursuant to and to the extent provided for in the provisions of paragraphs 4.3 and 4.4 of Schedule 13 by TTL or ATOC; or
- (c) by either:-
 - (1) TTL, giving notice to ATOC in respect of an individual Operator to terminate this Agreement in respect of that Operator only where:-
 - (A) any of the events set out in sub-clauses (i) to (vii) applies to such Operator; or
 - (B) there is a material breach of this Agreement or any of the events set out in sub clauses (i) to (vii) applies to such Operator in the case of an Operator who is an Open Access Operator; or
 - (2) ATOC (on behalf of the affected Operator) by giving notice to TTL where any of the events set out in sub-clauses (i) to (vii) applies to TTL

such events being where:

- (i) such Party summons a meeting of its creditors, makes a proposal for a voluntary arrangement, becomes subject to any voluntary arrangement, or is unable to pay its debts within the meaning of section 123 Insolvency Act 1986;
- (ii) such Party makes a general assignment, arrangement or composition with or for the benefit of its creditors;
- (iii) such Party has a secured party take possession of all or substantially all its assets or has a distress, execution, attachment, sequestration or other legal process levied or enforced against all or substantially all its assets where either (i) the secured party maintains possession of the assets for at least 30 calendar days or (ii) the legal process is not dismissed, discharged, stayed or restrained within 30 calendar days;
- (iv) such Party seeks or becomes subject to the appointment of an administrator, provisional liquidator, receiver, trustee, custodian or other similar official for it or for all or substantially all its assets;
- (v) such Party institutes or has instituted against it insolvency proceedings or any other relief under any bankruptcy or insolvency law or other similar law affecting creditors' rights, or a petition is presented for its winding-up or liquidation, and:

- i) it results in the making of an order for the winding-up or liquidation of such party; or
 - ii) it is not dismissed, discharged, stayed or restrained within 30 calendar days of the institution of the proceeding or the presentation of the petition;
 - (vi) such Party has a resolution passed for its winding-up, official management or liquidation (other than pursuant to a consolidation, amalgamation, merger or other reorganisation); or
 - (vii) such Party causes or is subject to any event which, under the applicable laws of any applicable jurisdiction, has an analogous effect to any of the events referred to in paragraphs (i) to (vi) above.
- (d) subject to Clause 18.3 (b) by TTL or ATOC (on behalf of the affected Operator) by notice served on the other in respect of an Operator if the Operator ceases or ceases to be entitled to operate the Operator's Services including but not limited to where the following circumstances apply:
 - (i) if the passenger licence granted to the Operator pursuant to the Act of 1993 has been or is to be terminated or suspended or the Operator surrenders such licence or gives notice to any person of its intention to do so;
 - (ii) if the Operator ceases or is to cease to be a member of the Scheme; or
 - (iii) upon the expiry or termination of the Operator's Franchise Agreement.

18.2 If the Secretary of State serves a notice on TTL and ATOC by reference to this Clause stating that the Secretary of State requires them to terminate this Agreement:

- (a) in relation to one or more Operators, then this Agreement shall terminate in respect of the relevant Operator(s); and
- (b) in its entirety, then the Agreement shall be terminated.

Such termination shall take effect from the date stated in the notice provided this shall not be earlier than 9 months from the date of the notice.

18.3 Termination Process

- (a) If either of TTL or ATOC serves a notice pursuant to Clause 18.1 (c), the Outgoing Operator's participation in the Agreement shall terminate with effect from whichever is the earlier of:-
 - (i) the date specified in that notice; and

- (ii) the effective date on which a Successor Operator adheres to this Agreement in accordance with Clause 3.6, but only in respect of those of the Operator's Services and Operator Stations in respect of which the Successor Operator is replacing and taking over from the Operator who has been terminated from this Agreement.
 - (b) If either TTL or ATOC serves a notice pursuant to Clause 18.1 (d), then (except to the extent otherwise stated in the notice) the relevant Operator's participation in this Agreement shall terminate with effect from the earlier of: -
 - (i) the date on which the Operator ceases to operate the Operator's Services; and
 - (ii) the effective date on which a Successor Operator adheres to this Agreement in accordance with Clause 3.6, but only in respect of those of the Operator's Services and Operator Stations in respect of which the Successor Operator is replacing and taking over from the Operator.
 - (c) Each relevant Operator will notify ATOC and TTL immediately it becomes aware that any of the events in Clauses 18.1 (c) and/or (d) will or may occur or has occurred in relation to itself.
 - (d) Each of ATOC and TTL will use all reasonable endeavours to consult with each other and will consult with the Secretary of State before serving any notice pursuant to Clause 18.1 (d).
- 18.4 Without prejudice to any provisions of Schedule 4 or the Services Agreement, in any circumstances where this Clause 18 provides for the cessation of participation of an Operator or Clause 3.6 provides for the admission of an Operator:
- (a) either TTL or ATOC may notify the other of any changes to this Agreement or to the Services Agreement, or Implementation Agreement (as applicable) of any Operator which it proposes should be made as a result, or to take account, of such cessation or admission. The Parties will use all reasonable endeavours to agree any such changes prior to the date of cessation and/or admission (as the case may be). In particular, the Parties acknowledge that at the date of signature of this Agreement, none of the Operators are Open Access Operators, and when the Operator to be admitted is an Open Access Operator changes may be required in respect of that Operator to take account of issues specific to Open Access Operators;
 - (b) subject to Clause 18.4(c), any failure to agree such changes shall be referred to the dispute resolution procedure in accordance with the provisions of Clause 22, with a view to such changes being agreed prior to the date of cessation and/or admission (where possible) or being agreed on the basis that they will take effect from the effective date of such

cessation and/or admission. ATOC and TTL will instruct the mediator, arbitrator and/or Expert to make his decision on the basis that any changes shall be only such changes as are required to enable the relevant agreement to operate as closely as reasonably possible to the original operation of the relevant agreement(s), taking into account such cessation or admission;

- (c) any person's adherence as a Party to this Agreement and the Services Agreement shall not be effective until the Secretary of State has approved any such changes to this Agreement in respect of which TTL and/or the Operators are required to seek prior consent from the Secretary of State.

18.5 Consequences of Termination

Any termination of this Agreement or cessation of the participation of any Operator (and any resulting termination of any Implementation Agreement (if applicable) or Services Agreement) shall not prejudice:-

- (a) the accrued rights and obligations of any Party under this Agreement, any Implementation Agreement (if applicable), or any Services Agreement; and
- (b) any other rights and remedies any Party may have in respect of any breach arising under this Agreement, any Implementation Agreement (if applicable), or any Services Agreement.

18.6 Subject always to Clause 18.5, where the Agreement is terminated by TTL in accordance with Clause 18.1 (c), or by TTL or ATOC in accordance with Clause 18.1 (d), in respect of an individual Operator, such Operator shall have no liability to TTL in respect of any costs or losses arising directly as a consequence of such termination including (without limitation) any TTL Charges arising in respect of the period after termination.

18.7 Subject always to Clause 18.5, where the Agreement is terminated in accordance with Clause 18.1(a) or Clause 18.2, neither TTL nor any of the Operators shall have any liability to any other Party in respect of any costs or losses arising directly as a consequence of such termination.

19. Audit

19.1 In addition and without prejudice to any audit provisions in the Amended Clearance Agreement TTL or ATOC (on behalf of the Operators) may request verification of the completeness and/or accuracy of any information supplied by the other for the purposes of or in connection with determining or demonstrating (as the case may be):-

- (a) Commissions; or
- (b) the allocation of revenues or the calculation of the Daily Discount Factor in accordance with Schedules 7 and 16; or
- (c) the derivation of Generalised Journey Times; or

- (d) the TTL Charges; or
- (e) compliance by the other Party with any of its other obligations under this Agreement.

19.2 As soon as practicable after receiving such a request for verification TTL or (in the case of a request received by ATOC) the Operators shall instruct auditors to verify such information and (after taking account of any representations made in the request) make a written report of their conclusions, addressed to TTL and the Operators.

19.3 The costs of such verification shall be borne by the Party or Parties making the request unless the information which is the subject of such request is shown by the auditors' report to be materially inaccurate, in which case such costs shall be borne by the Party or Parties receiving such request (to be determined by the auditor in the event of dispute).

20. Freedom of action

20.1 Each of the Operators and TTL agrees that nothing in this Agreement will impose any restriction on its freedom to offer for sale any other ticket, product or service.

21. VAT

21.1 All sums due under this Agreement are exclusive of VAT thereon, if any, which shall be charged in addition thereto under the relevant regulations in force at the time of making the relevant taxable supply.

21.2 Where under this Agreement a Party has agreed to make a reimbursement or indemnity in respect of any payment made or cost incurred by another Party then the first Party shall also reimburse any VAT paid by the other which forms part of its payment or costs incurred to the extent that such VAT is not available for credit for the other under sections 25 and 26 of the Value Added Tax Act 1994.

22. Mediation and Arbitration

22.1 Subject to Clause 17.4:-

- (a) any matter which is expressly provided in this Agreement to be resolved in accordance with this Clause 22; and
- (b) any dispute between (1) TTL and (2) the Operators or an Operator in connection with or arising out of this Agreement

(a *"Dispute"*) shall be settled in accordance with the provisions of this Clause 22.

22.2 The Parties in Dispute shall use all reasonable endeavours to negotiate in good faith and settle any Dispute before resorting to reliance on this Clause 22.

22.3 There shall be deemed to be a Dispute when either TTL or ATOC (on behalf of all Operators) or an Operator (the *"Disputing Parties"*) serves on the other a notice in writing (a *"Notice of Dispute"*) stating the

nature of the dispute or the matter to be resolved (as the case may be) and indicating that such notice is served pursuant to this Clause 22.3.

- 22.4 During a period of 7 calendar days from the date of service of a Notice of Dispute pursuant to Clause 22.3 the Disputing Parties shall negotiate in good faith to agree the matter or matters referred to in such notice.

Mediation

- 22.5 If:

- (a) the Disputing Parties fail to agree the matter or matters referred to in a Notice of Dispute within 7 calendar days of service of such notice; or
- (b) the Disputing Parties decide during the period of 7 calendar days from service of a Notice of Dispute to refer the matter or matters contained in such notice to mediation,

such matter or matters shall immediately be referred to a mediator appointed by agreement between the Disputing Parties. If the Disputing Parties have not appointed a mediator within 14 calendar days of service of a Notice of Dispute, such matter or matters shall be referred to the Centre for Effective Dispute Resolution who shall be asked to appoint a mediator within the next following 7 calendar days from the list of persons who are suitably qualified and willing and able to act as mediators maintained in accordance with such Rules.

- 22.6 The Disputing Parties shall within 7 calendar days of the appointment of a mediator meet the mediator in order to agree a programme for the exchange of any relevant information and the structure of the mediation.

- 22.7 Two representatives of each of the Disputing Parties (at least one of whom shall have decision-making authority in the matter or matters referred to mediation) shall be invited to attend any meetings with the mediator. No other person may attend such meetings without the mediator's agreement. Unless the Disputing Parties and the mediator agree otherwise, meetings with the mediator shall not continue later than 14 calendar days after the appointment of the mediator.

- 22.8 The Disputing Parties shall explain their respective positions to the mediator who shall encourage agreement on the matter or matters contained in the relevant Notice of Dispute. The mediator shall have no authority to impose a settlement on any Parties to the mediation.

- 22.9 TTL shall bear its costs and the Operators who are a party to the Dispute shall bear the costs of ATOC in preparing and submitting their respective cases to mediation unless the mediator considers that the mediation has been initiated or conducted frivolously or vexatiously by one Party to it in which case the mediator shall have power to order such Party to pay the fees of the mediator (including any applicable VAT) in full or such share as the mediator considers appropriate and to reimburse the other Parties in respect of its reasonable costs in connection with the mediation, such costs in default of agreement to be determined by the mediator. TTL and the Operators who are a party to the Dispute agree to be bound by any order of the mediator made under this Clause 22.9.

22.10 The mediator's proposals and advice, any views expressed or admissions made, the fact that a Party has or has not indicated a willingness to accept a proposal for agreement and all documents produced or disclosed in the course of a mediation shall be treated as confidential and unless otherwise agreed in writing between the Disputing Parties such matters and documents shall only be used for the purposes of the mediation and shall be treated as without prejudice in any subsequent litigation or arbitration proceedings involving the Parties to the mediation.

Arbitration

22.11 Subject always to Clause 22.22, if: -

- (a) any of the Disputing Parties refuses or fails at any time to participate in the mediation procedure referred to in Clauses 22.5 - 22.10; or
- (b) following mediation conducted pursuant to this Clause 22, the Disputing Parties are unable to reach agreement on the matter or matters contained in a Notice of Dispute,

any of the Disputing Parties may, by serving on the others a written notice, refer the Dispute to arbitration, to be dealt with in accordance with Clauses 22.12 to 22.14.

22.12 Any Dispute arising out of or in connection with this Agreement which has not been resolved in accordance with Clauses 22.1 to 22.11 (inclusive), including any question regarding the validity, existence or termination of this Agreement and/or this arbitration clause, shall be referred to and finally resolved by arbitration in London conducted in the English language by 1 arbitrator pursuant to the LCIA Rules which are deemed to be incorporated by reference into this Clause 22.

22.13 If:

- (a) the Disputing Parties fail to appoint an arbitrator within 14 calendar days of any of them serving on the others a notice under Clause 22.11; or
- (b) an arbitrator declines the appointment or after appointment is removed by order of a competent court or is incapable of acting and the Disputing Parties do not within 14 calendar days of the vacancy arising fill the vacancy,

then such arbitrator shall be appointed in accordance with the LCIA Rules.

22.14 The arbitrator shall conduct the arbitration in accordance with the LCIA Rules, unless otherwise agreed by the Disputing Parties.

Joinder of Disputes

22.15 If, in respect of a Dispute or any other dispute relating to any Implementation Agreement or any Services Agreement (in this Clause 22, a "*Subsequent Dispute*"):

- (a) there are raised issues which:-
 - (i) are substantially the same as, or connected with:-
 - (1) issues raised in any other existing and continuing Dispute; or
 - (2) any difference, controversy, claim or dispute of whatever nature arising under, out of or in connection with any (or any other, as the case may be) Implementation Agreement, Services Agreement or Pearl Device Agreement

(including, without limitation, any question of breach, interpretation, validity, effect, performance or termination of this Agreement, any Implementation Agreement, any Services Agreement or any Pearl Device Agreement); or
 - (ii) mean that for any reason it is necessary or desirable for a further Party to be entered into the Dispute

(each in this Clause 22 a "*Related Dispute*"); or
- (b) some common question of law or fact arises in the Subsequent Dispute and the Related Dispute; or
- (c) the rights to relief claimed in the Subsequent Dispute and the Related Dispute are in respect of, or arise out of, the same event or set of circumstances, then:
 - (1) if the Related Dispute has already been referred for determination by arbitration (or by a court) in accordance with the preceding provisions of this Clause 22 (and/or in accordance with the applicable provisions of the Implementation Agreement and/or the Services Agreement), then on the application of any Party prior to entering into the appointment of any other arbitral tribunal (or referral to any other court, as the case may be), the Subsequent Dispute shall be referred to the arbitral tribunal (or court) relating to the Related Dispute finally to determine whether the Subsequent Dispute should be heard at the same time as the Related Dispute by the arbitral tribunal (or court) to which the Related Dispute has been referred and the terms of such referral; and
 - (2) if the Related Dispute has yet to be referred for determination by arbitration (or by a court) in accordance with the preceding provisions of this Clause 22 (and/or in accordance with the applicable provisions of the Implementation Agreement and/or the Services Agreement), then on the application of any Party prior to entering into any appointment of any arbitral tribunal (or referral to any court, as the case may be), the Related Dispute and the Subsequent Dispute shall be referred together to the same arbitral tribunal (or court), which shall finally determine whether the Subsequent Dispute and Related Dispute should be heard at the

same time as each other by the arbitral tribunal (or court) to which they are referred and the terms applicable to any such hearing.

22.16 If proceedings have been commenced and an arbitral tribunal (or a court) appointed for both the Subsequent Dispute and the Related Dispute, then:-

- (a) on the application of any party to the Subsequent Dispute or Related Dispute, but at the discretion of the arbitral tribunal (or court, as the case may be), proceedings in respect of the Related Dispute and the Subsequent Dispute may be consolidated on such terms as may be agreed by the relevant parties, or in the absence of such agreement, as directed by the relevant arbitral tribunals (or courts), as the case may be; and
- (b) if, in the case of two arbitral tribunals, no agreement can be reached between them as to whether the proceedings in relation to the Subsequent Dispute and Related Dispute should be consolidated and on what terms, or which arbitral tribunal should determine the consolidated proceedings, the arbitral tribunal shall be elected by the President or Vice President of the Chartered Institute of Arbitrators and that arbitral tribunal shall determine the terms of consolidation.

22.17 If:-

- (a) a Dispute, Subsequent Dispute or a Related Dispute arises which is, or is to be, referred to arbitration (or to a court) under this Agreement or under any Implementation Agreement or any Services Agreement, and:
- (b) there exists another dispute (in this Clause 22 a "**Third Party Dispute**") which arises under, out of or in connection with any other agreement (in this clause 22 the "**Other Agreement**") to which one or more of the Parties is a party and to which one of the grounds in Clause 22.15 (a)-(c) would otherwise apply

then the provisions of Clause 22.15 and 22.16 shall apply, *mutatis mutandis*, to the determination of the Third Party Dispute provided that the other parties to the Other Agreement all provide their prior written consent to the consolidation of proceedings in relation to the Dispute, Subsequent Dispute or Related Dispute and the Third Party Dispute. A dispute under an Other Agreement which satisfies all of the requirements of this Clause 22.17 shall be treated as a Dispute for the purposes of this Clause 22 and the equivalent provisions of any Implementation Agreement and any Services Agreement in so far as is necessary to give effect to this Clause.

22.18 Any Party to a Dispute, Subsequent Dispute or Related Dispute as provided for in Clauses 22.15, 22.16 and 22.17 above may, acting reasonably, object to any proposed consolidation or ordering of concurrent hearings in relation to those disputes and (in the case of arbitral proceedings) where an objection is exercised the relevant proceedings shall not be consolidated or heard concurrently unless the

relevant tribunal considers such objection has been raised unreasonably by the relevant party. For the avoidance of doubt no dispute shall be consolidated with another where one of those has been referred to arbitration and the other to court.

22.19 Subject to Clause 22.18, if proceedings are not consolidated pursuant to Clauses 22.15 and 22.16 above, concurrent hearing of those proceedings may, on application by any Party who is a party to those proceedings, be ordered on such terms as may be:-

- (a) agreed by the relevant Party or Parties or in the absence of such agreement, as directed by the relevant arbitral tribunals (in the case of arbitration); and
- (b) in any event directed by a relevant court.

In the absence of agreement (where applicable) between the relevant arbitral tribunals, the directions under this Clause 22.19 shall be made by the President or Vice President of the Chartered Institute of Arbitrators. For the avoidance of doubt, the provisions of this Clause 22.19 shall not apply to any proposed consolidation of disputes to which the provisions of Clause 22.17 apply.

22.20 Each of the Disputing Parties acknowledges that the tribunals or courts hearing concurrent proceedings may communicate with each other to enable them to decide the terms on which such hearings are to be conducted and to the extent necessary to permit such communication, the Parties waive their rights of confidentiality of proceedings.

22.21 Proceedings to which any Party is a party which are neither consolidated nor ordered to be heard concurrently, shall remain confidential to the Party or Parties, as the case may be, party to such hearings. Where consolidation of proceedings or concurrent hearings in respect of proceedings involving any Party have been ordered, such proceedings shall cease to be confidential as between the parties involved in such proceedings but shall otherwise remain confidential for all other purposes, subject to the other provisions of this Agreement in respect of confidentiality.

Expert Determination

22.22 Where Clause 22.11 would otherwise apply, the Disputing Parties may agree to refer the Dispute for resolution by an Expert, subject to the provisions of Schedule 11.

Injunctive Relief

22.23 Nothing in this Agreement, the Services Agreement or Implementation Agreement shall prevent any Party's ability to claim injunctive relief.

General

22.24 For the avoidance of doubt, the Parties shall continue to provide their obligations in accordance with this Agreement, the Services Agreement and Implementation Agreement (if applicable) and without delay or

disruption while the Dispute is being resolved in accordance with this Clause 22.

23. Severance

23.1 If any provision of this Agreement (in whole or in part) is held invalid, illegal or unenforceable for any reason by any court of competent jurisdiction, such provision shall be severed from this Agreement and the remaining provisions shall continue in full force and effect as if this Agreement had been executed without the invalid, illegal, or unenforceable provision. In the event that in TTL's or ATOC's reasonable opinion such a provision is so fundamental as to prevent the accomplishment of the purpose of this Agreement, the Parties shall immediately commence good faith negotiations to remedy such invalidity.

24. Confidentiality

Confidentiality obligations

24.1 Subject always to Clause 24.2, each Operator and TTL undertakes with each other that it:-

- (a) shall keep confidential any information which it acquires (whether before or after the date of this Agreement) relating to sales, revenues and prices associated with PAYG, arrangements relating to settlement and allocation of revenue associated with PAYG and information relating to the business, assets or affairs of each other (and in the case of TTL, of the TTL Group); and
- (b) shall not disclose to any third party (including in the case of TTL to any other Operator except to the extent required in the proper performance of its obligations under this Agreement, any Implementation Agreement (if applicable) and/or any Services Agreement) any such information.

The Operators and TTL agree that each Party may pass such information (whether confidential or otherwise) to its respective Group members who need to know such information for the purposes of performing their obligations or receiving their rights related to this Agreement. Each Party shall procure compliance with this Clause 24 by those Group members to whom it passes such information.

Exceptions from confidentiality obligations

24.2 The confidentiality obligations contained in Clause 24.1 shall not apply to the disclosure of information to the extent that such disclosure is:

- (a) of publicly available information or information which becomes publicly available otherwise than as a result of a breach of this Clause 24;
- (b) of information which is lawfully in the possession of the receiving Party prior to its disclosure by the disclosing Party;

- (c) of information which is received in good faith by the receiving Party from a third party and is not knowingly disclosed in breach of this Clause 24;
- (d) required by any law (including any order of a court of competent jurisdiction) or the rules of any stock exchange or governmental or other regulatory authority, whether or not having the force of law (but, if not having the force of law, compliance with which is in accordance with the general practice of persons subject thereto);
- (e) by TTL to any person who has an entitlement to any part of the PAYG revenue (including any subsidiary of TTL so entitled) or by any TTL Third Party to its parent corporation or company;
- (f) required to ensure compliance with any statutory duties to which the disclosing Party is subject under the Act of 1993, or under any other relevant legislation;
- (g) to the Secretary of State for Transport (or the government department responsible for public transport in London for the time being), the ORR, or any person or body who has statutory responsibilities in relation to transport in London and their employees, agents and professional advisers;
- (h) to any person which the disclosing Party considers has a bona fide interest in acquiring any subsidiary, Holding Company or subsidiary of a Holding Company, in each case of the disclosing Party with the written consent of the relevant other Party (not to be unreasonably withheld or delayed);
- (i) to RSP, its employees, agents or advisers (including any Systems Administrator or Funds Administrator) in fulfilment of any obligation or duty owed by TTL to the RSP pursuant to the Amended Clearance Agreement or by any Operator to RSP pursuant to the Ticketing and Settlement Agreement;
- (j) by TTL to any person for the purpose of enabling such person to decide whether to become a TTL Third Party or in connection with such person's adherence to this Agreement as a new Operator, provided in each case that such information disclosed is limited to information relating to the terms of this Agreement, and not confidential information of an individual Operator;
- (k) to HM Revenue and Customs or any other taxation authority; or
- (l) by any Party to any contractor to that Party, as may be reasonably required for the purpose of enabling that Party to comply with its obligations under this Agreement, or any Implementation Agreement (if applicable) or Services Agreement

provided always that:-

- (i) the party to whom such confidential information is released pursuant to Clauses 24.2 (e), (h), (i), (j) and (l) is subject to the

same confidentiality obligations contained in this Clause 24 in all material respects;

- (ii) only such confidential information as is required for the specific disclosure purpose is disclosed; and
- (iii) the disclosure is advised to the relevant Party in advance (where reasonably possible).

25. Amendments

25.1 Except as otherwise set out in this Agreement, this Agreement may be amended only by an instrument in writing signed by TTL and ATOC (on behalf of the Operators).

26. Assignment/Sub-contracting And Change Of Control

26.1 Subject to Clause 26.2 no Party may assign or transfer any of its rights or obligations under this Agreement in whole or in part without the prior written consent of the other Parties (which shall not be unreasonably withheld or delayed) except that: -

- (a) subject to Clause 26.1(b), TTL may assign its rights and/or transfer its obligations in whole or in part to any member of the TTL Group without the prior consent of the Operators, and TTL's obligation shall be to notify ATOC upon such assignment or transfer;
- (b) TTL's entitlement to assign and/or transfer pursuant to Clause 26.1(a) shall be subject to the prior confirmation by the Secretary of State that he has no objection to such assignment or transfer (such confirmation not to be unreasonably withheld or delayed).

26.2 TTL shall be entitled to sub-contract all or any part of its obligations under this Agreement without the prior written consent of the Operators, except that nothing in this Clause 26.2 shall release TTL from its obligations under Schedule 4 including without limitation paragraphs 1 (f) and 2.2 (c) of Part III of Schedule 4.

26.3 No sub-contracting will relieve a Party of its obligations under this Agreement.

26.4 If at any time during the term of this Agreement: -

- (a) TTL ceases to be under the Control of TfL (which, for the avoidance of doubt, shall include for this purpose any public sector successor to TfL. TTL will not cease to be under the Control of TfL if it remains under the Control of a member of the TTL Group for so long as that member of the TTL Group is under the Control of TfL); and
- (b) the Secretary of State has notified the Parties to this Agreement in writing that the Secretary of State is not content with the change of Control described in Clause 26.4 (a) for the purposes of this Clause 26.4

then ATOC (on behalf of all of the Operators) shall be entitled to terminate this Agreement by notice in writing. The notice must be served within 30 days of receipt of the Secretary of State's notification pursuant to Clause 26.4(b). The notice will specify the date of termination which shall not be earlier than 9 months from the date of ATOC's notice.

27. Waiver of Rights

27.1 No waiver by a Party of a failure or failures by any other Party to perform any provision of this Agreement shall operate or be construed as a waiver in respect of any other or further failure whether of a like or different character.

28. Notices

Address of notices

28.1

(a) Save as otherwise expressly provided in this Agreement any notice or other communication to be given under this Agreement shall be given in writing and either be delivered by hand, facsimile or sent by first class post to the addresses/numbers set out below (or such other address/number as may be notified by TTL or ATOC to the other (from time to time for this purpose):

If to TTL:

Transport Trading Limited
Windsor House
42/50 Victoria Street
London SW1H 0TL

Facsimile number: 020 7126 4545

Addressed for the attention of: The Director of Fares and Ticketing

If to the Operators (or any of them):

ATOC Limited
40 Bernard Street
London
WC1N 1BY

Facsimile number: 020 7841 8268

Addressed for the attention of: Managing Director of Rail Settlement Plan Limited

(b) For the purposes of any notice to be given to ATOC pursuant to Clause 22 (Mediation and Arbitration) and Clause 33 (Freedom of Information), notice shall also be given by TTL to the relevant Operator, at the Operator's registered address from time to time.

Deemed service

28.2 All notices given in accordance with Clause 28.1 shall be deemed to have been served as follows:

- (a) if delivered by hand, at the time of delivery;
- (b) if posted, at the expiration of three Business Days after a day on which the envelope containing the same was delivered into the custody of the postal authorities;
- (c) if delivered by facsimile, at the time of transmission, provided that a confirming copy is sent by first class post to the other party within 24 hours after transmission

provided that where, in the case of delivery by hand, such delivery occurs after 6 p.m. on a Business Day or on a day which is not a Business Day, service shall be deemed to occur at 9 a.m. on the next following Business Day. References to time in this Clause 28 are to local time in the country of the addressee.

Proof of service

28.3 In proving such service it shall be sufficient to prove that the envelope containing such notice was properly addressed and delivered either to the address shown thereon or into the custody of the postal authorities as a pre-paid first class letter.

29. 2012 games

29.1 No Operator shall (without the prior written approval of the London Organising Committee of the Olympic Games Limited ("LOCOG") in each case) represent that PAYG, or the PAYG System or this Agreement have been endorsed or approved by the British Olympic Association, the British Paralympic Association, LOCOG or any other official Olympic or Paralympic body, or that the Operator is in any way associated with those organisations, the Olympic Games and/or Paralympic Games, or London 2012. Nor shall the Operators be required under this Agreement to represent, endorse or approve the same.

30. Corrupt Gifts and Payment of Commission

30.1 Each of the Operators and ATOC shall not, and each shall ensure that their employees, agents and sub-contractors do not, pay any commission, fees or grant any rebates to any employee, officer or agent of TTL or any member of the TTL Group nor favour any employee, officer or agent of TTL or any member of the TTL Group with gifts or entertainment of significant cost or value nor enter into any business arrangement with employees, officers or agents of TTL or any member of the TTL Group other than as a representative of TTL, without TTL's or another member of the TTL Group's prior written approval.

30.2 TTL shall not, and shall ensure that its employees, agents and sub-contractors do not, pay any commission, fees or grant any rebates to any employee, officer or agent of an Operator or ATOC nor favour any employee, officer or agent of an Operator or ATOC with gifts or entertainment of significant cost or value nor enter into any business arrangement with employees, officers or agents of an Operator or ATOC

other than as a representative of the Operator or ATOC (as the case may be), without the prior written approval of the Operator or ATOC (as the case may be).

31. No Set-Off

31.1 Subject to Clauses 10 (Revenue and Payment) and 11 (Commission) and except as otherwise expressly set out in this Agreement, no Party (“the first Party”) will be entitled to set off any liability of the other (“the second Party”) to the first Party arising under or in respect of this Agreement, the Implementation Agreement(s) and/or the Services Agreement against any liability of the first Party to the second Party arising under or in respect of any of those agreements.

32. Data Provision and Protection of Personal Data

32.1 Each Party shall comply with all of its obligations under the DPA and, if a Party is Processing Personal Data on behalf of another, shall only carry out such Processing for the purposes of carrying out their obligations under this Agreement and shall act in accordance with instructions from that other Party.

32.2 Entitlement and access to data

(a) Subject to Clause 32.2(b), the Operators shall be entitled to and to have access to the following data which is contained on the central system within the PAYG System:

(i) subject to Clause 32.2(a)(iii), all data relating to PAYG Journeys, irrespective of mode; and

(ii) subject to Clause 32.2(a)(iii), all PAYG sales data; and

(iii) in relation to each Operator, Personal Data for customers that have validated a PAYG Journey at one or more of that Operator’s Operator Stations (to the extent and for so long as such access is permitted under the DPA including having regard to any consents required from customers for such access). Without limiting Clause 32.6, Operators shall have no right to any other Personal Data in respect of such customers or in respect of any other customers.

(b) The Parties will co-operate to define, agree and implement an appropriate cost effective means for the Operators to obtain such data set out in Clause 32.2(a) above as they require, and to agree any corresponding changes to this Agreement including those to take account of the additional costs incurred in implementing and operating the agreed requirement. Pending such agreement, the extent of TTL’s obligations to the Operators to make such data available shall be:-

- (i) TTL's obligations described in the "Information Services" section of Appendix 2.3 of Schedule 4; and
 - (ii) TTL's obligation under this Agreement and the Amended Clearance Agreement to supply information to RSP.
- (c) Nothing in Clause 32.2(b) above limits TTL's obligations under this Agreement or the Amended Clearance Agreement in respect of: -
- (i) the provision of data to RSP; or
 - (ii) the requirement to deliver any report or other deliverable which is required by the terms of this Agreement to include data described in Clause 32.2(a).

32.3 Consent

- (a) TTL and the Operators acknowledge that at the date of this Agreement, the Oyster registration to be completed by customers permits the customer Personal Data to be collected and used for the purposes of customer services and administration, the provision of travel related information, research and fraud prevention; and
- (b) As soon as is reasonably practicable after signature of this Agreement, TTL will ensure that any new customer who registers with TTL for PAYG will be given the opportunity, as part of the registration process, to consent to an Operator (whose services the customer has used) sending offers and promotions to the customer. "TTL shall consult with ATOC in advance with respect to: -
 - (i) the content and the format of the wording to be used in the registration process to give new customers this opportunity; and
 - (ii) any subsequent change to that wording

and will in each case incorporate any suggested amendments proposed by ATOC where this is reasonable and practicable.

32.4 The Operators shall treat such data supplied under Clause 32.2 (where it contains Personal Data) in accordance with the provisions of the DPA including the "principles" as set out therein (notwithstanding that the Operator may not be the Data Controller as that term is defined in the DPA) including the requirement to take appropriate technical and organisational measures to avoid the unauthorised or unlawful processing of personal data and its accidental loss, destruction or damage.

32.5 The applicable Operator will notify TTL if it intends to introduce a system or organisational arrangements to process any customer data supplied by TTL on any portable or mobile electronic device and ensure that

appropriate technical and organisational measures have been taken to protect customer data.

32.6 Subject always to each Party complying with its obligations under the DPA, where requested by authorised personnel of an Operator, TTL will, as soon as reasonably practicable, disclose to such authorised personnel a customer's Personal Data which may be reasonably required for the purpose of using such information in accordance with Section 29 of the DPA, and as permitted in accordance with the consents obtained from the Data Subject for the purpose of revenue protection or fraud prevention.

33. Freedom of Information

33.1 The Operators acknowledge that TTL:

- (a) is subject to the FOI Legislation and agree to assist and co-operate with TTL to enable TTL to comply with its obligations under the FOI Legislation. TTL acknowledges that the Operators are not at the date of this Agreement subject to the FOI Legislation; and
- (b) may be obliged under the FOI Legislation to disclose Information without obtaining consent from the Operators.

33.2 Without prejudice to the generality of Clause 33.1, each Operator shall and shall procure that its sub-contractors (if any) shall:

- (a) transfer to TTL (or such person as may be notified by TTL to the Operator) each Information Request relevant to this Agreement (in relation to TTL or any member of the TTL Group) that it or they (as the case may be) receive as soon as practicable and in any event within 2 Business Days of receiving such Information Request; and
- (b) in relation to Information held by the Operator 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 shall be provided within 7 Business Days of a request from TTL (or such other longer period as TTL may reasonably specify), and in such forms as TTL may reasonably specify.

33.3 TTL shall 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 but TTL:-

- (a) shall notify the relevant Operators of the content of any Information Request received by TTL which will or may require the disclosure of any Information relating to this Agreement and the relevant Operator; and
- (b) shall use its best endeavours to consult with each relevant Operator in respect of such Information Request where the Operator has advised TTL that it wishes to seek to rely on any exemption(s) from the requirement for disclosure under the FOI Legislation, for the purposes of determining whether

an exemption applies, or where the public interest may lie. An Operator shall not itself respond to any person making an Information Request, save to acknowledge receipt, unless expressly authorised to do so by TTL;

- (c) shall notify the relevant Operators if and when it discloses any Information pursuant to an Information Request of the type referred to in Clause 33.3(a), with a copy of the information disclosed (provided that TTL shall not be obliged to disclose the identity of the person making the Information Request to whom the information is disclosed); and
- (d) acknowledges that nothing in this Clause 33 shall prejudice an Operator's rights under Clause 24 where TTL discloses any Information outside of the remit of its obligations under the FOI Legislation.

33.4 If and to the extent that a change in the FOI Legislation after the date of this Agreement results in an Operator having the same duties as TTL under the FOI Legislation, then this Clause 33 shall apply mutatis mutandis to the Operator as if references to TTL were references to the Operator and references to the Operator were references to TTL.

33.5 Notwithstanding Clause 4.3, any notices required to be given pursuant to this Clause 33 shall be served directly on TTL by the relevant Operator and by TTL on the relevant Operator (in each case with a copy to ATOC).

33.6 The Operators acknowledge that guidance may be issued by the Information Commissioner from time to time in relation to the FOI Legislation, and that TTL shall be entitled to have due regard to such guidance when making any decision in relation to 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.

34. **Survival**

34.1 The provisions of Clauses 1, 4, 7.1 (in respect of any Schedule listed in this Clause), 8.3, 10 (in respect of the period prior to termination), 15, 16, 18, 21-24, 27- 30, 32-37, 39 and 40, and Schedules 1, 11, 13 (paragraph 5), 14 and 15 and any other Clauses or Schedules that are necessary to give effect to those Clauses shall survive termination or expiry of this Agreement. In addition, any other provision of this Agreement which by its nature or implication is required to survive the termination or expiry of the Agreement shall do so.

35. **Rights of Third Parties**

35.1 Subject to Clause 35.2 and 35.3, 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 by any person not a party to it, other than by a Party's permitted successors and assigns.

35.2 Notwithstanding Clause 35.1, and subject to any limitation or exclusion of liability under this Agreement, an Implementation Agreement and/or a Services Agreement, the Operators acknowledge and agree that:

- (a) members of the TTL Group may suffer loss or damage in the event of any breach by an Operator of its obligations under this Agreement, an Implementation Agreement and/or a Services Agreement; and
- (b) without prejudice to any other rights TTL may have, as between TTL and any such Operator, such loss or damage shall be deemed to have been suffered by TTL and TTL shall be entitled to recovery in respect of such loss or damage in the same way as TTL would have been entitled if all such loss or damage had in fact been incurred by it directly.

35.3 The Secretary of State has the right to enforce only Clauses 3.6, 13.1, 17.3, 18.2, 26.1 and 26.4 of this Agreement subject to and in accordance with the terms of those Clauses and in accordance with the provisions of the Contracts (Rights of Third Parties) Act 1999. Without prejudice to any other agreement between any of the them and the Secretary of State, the Parties reserve the right to rescind or vary this Agreement except for Clauses 3.6, 13.1, 17.3, 18.2, 26.1 and 26.4 without the consent of the Secretary of State.

36. Entire Agreement

36.1 Subject to Clause 36.2 this Agreement and all documents referred to in this Agreement, including the Implementation Agreements and Services Agreements, contain all of the terms which the Parties have agreed relating to the subject matter of such agreements and such documents supersede and extinguish any prior drafts, agreements, undertakings, representations, warranties and arrangements of any nature whatsoever, whether or not in writing relating to the provision of this Agreement. No Party has been induced to enter into this Agreement by a statement which it does not contain.

36.2 Nothing in this Clause 36 excludes any liability which one Party would otherwise have in respect of any statement it has made fraudulently to another Party.

37. Relationship of the Parties

37.1 Nothing in this Agreement constitutes, or shall be deemed to constitute, a partnership between the Parties. Except as expressly provided in this Agreement, no Party shall be deemed to be the agent of another Party, nor shall a Party hold itself out as the agent of another Party.

37.2 Except as set out in Clause 4.4 or otherwise expressly set out in this Agreement:-

- (a) the obligations of each Operator arising under this Agreement shall be several in relation to each respective Operator and not joint with any other Operator; and
- (b) no guarantee or other assurance or acceptance of liability is provided in connection with this Agreement by any Operator in respect of any other Operator.

38. Force Majeure

38.1 If to the extent that and only for as long as a Force Majeure Event:-

- (a) prevents a Party (the "Affected Party") from complying with any of its obligations under this Agreement; or
- (b) would otherwise result in the Affected Party incurring any liability to another Party under this Agreement, any Services Agreement or an Implementation Agreement

and provided the Affected Party complies with Clauses 38.2 and 38.3 in all respects, the Affected Party shall be excused performance of those obligations and such liability.

38.2 The Affected Party shall inform the other Parties in writing as soon as practicable of the occurrence of a Force Majeure Event giving full details of its expected effect and duration, together with the evidence necessary to justify a claim for relief under Clause 38.1. If the Force Majeure Event continues for more than seven calendar days the Affected Party shall notify the other Parties regularly and not less than once every seven calendar days of the steps it is taking pursuant to Clause 38.3.

38.3 The Affected Party shall use its reasonable endeavours to resume performance of its obligations as soon as practicable and in the meantime to mitigate the effects of any such event and shall keep the other Parties fully informed about the steps taken and proposed to be taken to achieve this.

39. Further Assurance

39.1 Each Party will do or procure the doing of all acts and things and execute or procure the execution of all such documents as another Party reasonably considers necessary to give full effect to the provisions of this Agreement.

40. Governing Law

40.1 This Agreement shall be governed by and construed in accordance with the law of England and Wales.

41. Counterparts

41.1 This Agreement may be executed in one or more counterparts each signed by or on behalf of one of the Parties and such counterparts shall together constitute one agreement.

IN WITNESS WHEREOF the Parties hereto have executed this Agreement as of the day and year first above written.

SCHEDULE 1

Definitions

Accredited means accredited by each of RSP and the Nominated Provider under the respective processes applied by them from time to time for accreditation of the relevant devices from time to time;

Act of 1993 shall mean the Railways Act 1993;

Affected Party means as set out in Clause 38.1;

Alteration Services means as set out in Schedule 14 paragraph 11;

Alternative Sub-Route means as set out in Schedule 7 Part 2, paragraph 2.10;

Amended Clearance Agreement shall mean the agreement between RSP and London Regional Transport dated 15th October 1995 relating to the clearance and settlement of sums through RSP, amended to the satisfaction of TTL and RSP to take account of the provisions of this Agreement;

Anticipated PAYG Launch Date means as at the date of this Agreement, the date set out in the Key Milestone Plan, as such date may be amended from time to time thereafter in accordance with the provisions of Schedule 13;

Apportionment Node means a station at which validations are recognised for the purposes of defining Routes, as set out in Tables 5 and 11 of Schedule 3 Part 2;

ATOC shall mean the Association of Train Operating Companies;

Auto-completed Journey means an Entry Only Journey subsequently made complete pursuant to the provisions of Schedule 2 Part 2 m 6 (a) or otherwise and treated by the PAYG System as a Complete Journey;

Base Data means configurable tables containing the current values of software variables;

Baseline Standard means as set out in Clause 8.8;

Business Day shall mean any day other than a Saturday or Sunday on which banks are open for business in London;

Bus Journey means a PAYG Journey made on bus or tram services provided by or on behalf of TfL, or on TCL services;

Category means as set out in Schedule 2 Part 2 a;

Chairman means the Chairman of the Committee from time to time appointed pursuant to Clause 5.3(a);

Change Control Procedure means the procedure set out in Schedule 9;

Claimant Operator means as set out in Clause 16.10(a);

Commission means commission and/or fulfilment fees payable in respect of PAYG as described in Clause 11 and Schedule 8;

Committee means the committee established in accordance with Clause 5;

Communication Costs means:-

- (a) all of those costs in the table at Part B of Appendix 3 to Schedule 4 of this Agreement which are described as “WAN Communications” items (both set up and ongoing charge elements); and
- (b) in the case of a termination of this Agreement pursuant to Clause 18.1(b), the amount of any cancellation charges or other costs (as such other costs are mitigated by TTL) payable by TTL on the termination of the contract(s) between TTL and its sub-contractor(s) in respect of the provision of those “WAN Communications” items;

Communications Installation Mid Point means as described in Schedule 4, Appendix 3 Part B;

Complete Journey means a Rail Journey consisting of a series of PAYG validations commencing with an Entry Validation and ending with an Exit Validation within the Maximum Journey Time, in accordance with Schedule 3;

Conditions of Carriage shall mean the conditions of carriage issued from time to time by TfL (or its subsidiaries or TTL Third Parties) in respect of the rights and obligations of passengers and TfL (or its subsidiaries or TTL Third Parties); and by the Operators (the National Conditions of Carriage) in respect of the rights and obligations of passengers and the Operators;

Continuation Entry means as set out in Schedule 3 Part 2 Table 10;

Continuation Exit means an exit validation at certain designated locations. Such an exit validation may be followed by a second exit validation (both within the Maximum Journey Time and, where relevant, within the Maximum Interchange Time) either at the same or another location. The PAYG System will treat both exits as part of a single journey;

Control means as defined by section 416 of the Income and Corporation Taxes Act 1988;

Critical Failure means (a) the Critical Failures listed in the launch and reversal plan produced pursuant to paragraph 2.2 of Schedule 13; (b) an event that would result in a failure to achieve the requirements detailed in paragraph 3.1(b) of Schedule 13; and (c) a failure or an event that can reasonably be expected to have a material adverse impact on the achievement of PAYG Launch on the Anticipated PAYG Launch Date;

Cubic means Cubic Transportation Systems Limited;

Daily Discount Factor means, in relation to a Traffic Day, the value of X_T/Y_T calculated for the Traffic Day in accordance with Schedule 7 Part 2 Paragraph 1.2;

Defendant Operator means as set out in Clause 16.10(b);

Different Station Re-Entry Time means as set out in Schedule 2 Part 2m (5);

Dispute means as set out in Clause 22.1;

DLR shall mean Docklands Light Railway Limited a wholly owned subsidiary of TTL;

DPA means the Data Protection Act 1998 as interpreted in accordance with Directive 95/46/EC and all descending statutory instruments (including the Privacy and Electronic Communications (EC Directive) Regulations 2003);

Emergency OSI means a setting used in real time by the Control Centre pursuant to Schedule 4 Appendix 2.2 such that within a fixed time limit (known as the Emergency OSI Time) at all stations assigned with this setting passengers may exit and re-enter the paid area and will be treated by the PAYG System as making a continuous journey;

EMV Standard means as set out in Clause 17.10;

Engineering Hours means the period between 01.00 and 05.00 on each day (or such other times as may be agreed to between the relevant Parties, which in the case of TTL's agreement shall be at its absolute discretion);

Entry Charge means a charge made by a validation device at the commencement of a Rail Journey;

Entry Only Journey means a Rail Journey in respect of which an Entry Validation is recorded without an associated Exit Validation;

Entry Threshold means the PAYG Balance required if an Entry Validation is to take place when a valid Travelcard is not present on the item of smartmedia concerned;

Entry Validation means an electronic record of the commencement of a PAYG Journey and the deduction of an Entry Charge in accordance with Schedule 2 Part 2m;

Existing PAYG Acceptance Arrangements means those arrangements between TTL or any member of the TTL Group and those of the Operators who accept PAYG on their services as at the date of this Agreement providing inter alia for the acceptance of PAYG as a means of payment in respect of journeys on those services and the consequential allocation of revenue;

Exit Charge means a charge made by a validation device in respect of an Exit Only Journey;

Exit Only Journey means a Rail Journey in respect of which an Exit Validation is recorded without an associated Entry Validation;

Exit Token means an electrical indicator placed by station staff on an item of TTL Smartmedia that will enable the holder to exit through a gateline without transacting an Exit Validation;

Exit Validation means an electronic record of the termination of a PAYG Journey and the adjustment of the PAYG Balance to ensure the PAYG Value Expended for that journey is in accordance with the PAYG fare for the journey, or the Exit Charge, as appropriate, in accordance with Schedule 2;

Expert means as set out pursuant to Clause 22.22 and Schedule 11;

Extension Permit means in the case of the holder of a Travelcard residing on TTL Smartmedia, an entitlement to travel on the Operators' services beyond the validity of the Travelcard as further detailed in Schedule 2 Part 2 k;

Extension Permit Minimum Amount means as set out in Schedule 2 Part 2 k;

Fares Node means a location at which the following types of validations are recognised for the purposes of setting fares:

- (a) a validation at a Routeing Validator at one of the stations set out in Schedule 3 Part 2 Table 5 as being Fares Nodes; and
- (b) an OSI Entry Validation or an OSI Exit Validation at one of the stations set out in Schedule 3 Part 2 Table 11 as being Fares Nodes;

Fares Revision Date means the date of the primary fares revision on 2nd January of each year and the secondary fares revisions which take place in May/June and September of each year as agreed pursuant to Schedule 2 Part 2q. Such a fares revision may involve changes to fares, ticketing products and associated ticket selling devices;

First Price Review means as set out in the table to Schedule 4, Appendix 3, Part B;

FOI Legislation means the Freedom of Information Act 2000, all regulations made under it and the Environmental Information Regulations 2004 and any amendment or re-enactment of any of them;

Force Majeure Event means any event if and only to the extent that such event:

- (i) is not caused by, and its effects are beyond the reasonable control of, the Affected Party; and
- (ii) is not an event which the Affected Party could reasonably have avoided or provided against (including to the extent it is reasonable to do so by having in place disaster recovery arrangements)

and subject always to (i) and (ii) above, includes (without limitation):-

- (a) war or civil war (whether declared or undeclared) or national emergency;
- (b) civil unrest;
- (c) compliance with any law or governmental order, rule, regulation or direction;
- (d) any act of terrorism or a specific threat of terrorism;
- (e) lightning, earthquake, or extraordinary storm;
- (f) fire, explosion or flooding;
- (g) labour disputes (other than those affecting only the workforce of the Affected Party or its subcontractors);
- (h) failure or shortage of power or fuel;
- (i) failure by any statutory undertaking local authority or other like body; or
- (j) where TTL is the Affected Party, the failure by the Ticketing Services Provider or any other of its subcontractors to perform its contract with TTL due to the occurrence of any such events;

Franchise Agreement means:-

- (a) an agreement entered into with the Secretary of State pursuant to Section 23 of the Act of 1993; or
- (b) an agreement entered into by a Franchised Operator with a person, pursuant to which the Franchised Operator provides railway passenger services which the Secretary of State has a duty to provide or secure pursuant to Section 30 of the Act of 1993;

Franchised Operator means a person providing railway passenger services: -

- (a) under a franchise agreement made pursuant to Section 23 of the Act of 1993; or
- (b) which the Secretary of State has a duty to provide or secure the provision of pursuant to Section 30 of the Act of 1993;

Gate Reader means a PAYG validation device attached to a ticket gate;

Generalised Journey Time means, for the purposes of Schedule 7, the estimated perceived travel cost of a Rail Journey expressed in minutes and based on the weekday timetable:

- (a) in the case of TTL Rail Services, the travel cost estimate comprises the sum of:
 - the scheduled in-train travelling time;
 - the estimated passenger waiting time, including time spent waiting at any interchanges, taken to be 70% of the average scheduled interval between trains – with a weight of 2.5; and
 - the estimated time needed to interchange between services – based on operator surveys – with a weight of 2.0.

Such travel cost estimates are derived separately for a number of time bands and then estimated for the whole day using weightings that reflect passenger numbers travelling during those time bands.

- (b) in the case of the Operators' Services (including any London Overground Operator), the travel cost estimate comprises the sum of:
 - the scheduled in-train travelling time;
 - a frequency penalty following standard railway industry guidelines representing the passenger waiting time at the origin station;
 - the waiting time at any interchanges plus an additional penalty of 10 minutes per interchange.

Such travel cost estimates are derived continuously throughout the day and then weighted by passenger numbers to provide whole day estimates.

- (c) in the case of journeys involving interchange between TTL Rail Services and Operators' Services (or vice versa) the travel cost estimate comprises the sum of:
 - the relevant location-specific interchange times set out in Schedule 3 Part 2 Table 4 – with a weighting of 1.3 – plus an additional 5 minutes;
 - the results of applying the approach as set out under (a) and (b) above for those parts of the journey on TTL Rail Services and the Operators' Services (including any London Overground Operator) respectively;

Good Value means the commitment made to passengers regarding the fares charged for PAYG as detailed in Schedule 2 Part 2h;

Group means in the case of TTL, the TTL Group, and in the case of each Operator, the Operator's subsidiaries and Holding Companies;

Here-to-Here Journey means a PAYG Only Journey consisting of an Entry Validation followed by an Exit Validation at the same station within the Same Station Time but not within the Same Station Exit Time;

Holding Company shall have the meaning ascribed thereto by Section 736 and Section 736A of the Companies Act 1985 until 30th September 2009, and Section 1159 and Schedule 6 of the Companies Act 2006 from 1st October 2009 (in each case as amended from time to time);

Implementation Agreement means an agreement between an Operator and TTL governing the supply of equipment and services to deploy the PAYG System on the Operator's network;

Incomplete Journey means an Entry Only Journey or an Exit Only Journey;

Information means information recorded in any form held by TTL or by the Operator on behalf of TTL;

Information Request means a request for any information under the FOI Legislation;

Intellectual Property Rights means any patent, know-how, trade mark or name, service mark, design right (in each case whether registered or unregistered), copyright, rights in passing off, database right, rights in commercial or technical information, any other rights in any invention, discovery or process and any other intellectual property rights, whether registered or unregistered and including applications for the grant of any such rights and all rights or forms of protection having equivalent or similar effect in each case in the United Kingdom and anywhere else in the world;

Intermediate Validation means validations used for revenue allocation purposes and made:

- (a) at a Routeing Validator at the stations indicated as being Apportionment Nodes in Schedule 3 Part 2 Table 5; or
- (b) at those OSI locations shown as being Apportionment Nodes in Schedule 3 Part 2 Table 11:
 - (i) where the exit station and the entry station are both controlled by ticket gates, the pair of validations (OSI Exit Validation followed by OSI Entry Validation); for the avoidance of doubt a single validation at either the exit station or the entry station does not constitute an Intermediate Validation;
 - (ii) where one of the two stations (entry or exit) is controlled by ticket gates and the other is controlled by passenger validators, a validation at the ticket gates (whether or not a validation at the station controlled by passenger validators is present);
 - (iii) where the exit station and the entry station are both controlled by passenger validators, a validation at either the exit station or the entry station or both.

The exit station and entry station referred to above are with reference to the columns headed "Exit station" and "Entry station" respectively in Schedule 3 Part 2 Table 11;

Intermediate Validation Routeing Record has the meaning given in Schedule 7 Part 2, paragraph 2.5;

ITSO means the ITSO Organisation, a non-profit distributing organisation owned by its members;

Joint Station means in the context of this Agreement an Operator Station which:

- a) is served by TTL Rail Services; or
- b) is one of the following: Liverpool Street, Fenchurch Street, Marylebone, Euston, Watford Junction, Elephant & Castle, London Bridge (Platforms 1 to 6 only), Blackfriars, City Thameslink, St Pancras International, West Hampstead Thameslink, King's Cross, Drayton Park, Essex Road, Finsbury Park; Clapham Junction;

Key Features means those features of PAYG set out in Schedule 2;

Key Milestone Plan means as set out in Schedule 13 paragraph 2.2(a);

Launch Commitment Date means the date agreed pursuant to paragraph 2.2(a) of Schedule 13;

LCIA Rules means the rules of the London Court of International Arbitration;

LOCOG means the London Organising Committee of the Olympic Games Limited;

London Overground means such rail services as are:-

- (a) operated by or on behalf of a member of the TTL Group (including by a concessionaire) from time to time; and
- (b) branded as "London Overground" or such other brand as may replace it from time to time;

London Overground Operator means the operator of the London Overground services from time to time;

London Overground Station(s) means the stations shown in Schedule 3 Part 2 Table 15 as being London Overground Stations;

Long Stop Date means as set out in Schedule 13, paragraph 4.3;

London Terminals means Blackfriars, Cannon Street, Charing Cross, City Thameslink, Euston, Fenchurch Street, King's Cross, Liverpool Street, London Bridge, Marylebone, Paddington, St Pancras International, Victoria, Waterloo East and Waterloo stations;

LUL shall mean London Underground Limited a wholly owned subsidiary of TTL;

Magnetic Gate Data means as defined in Schedule 4, Appendix 2.6;

Maintenance Window means a period of planned downtime of the PAYG System which shall occur between the hours of 20.00 and 22.00, not more frequently than once every 4 weeks and details of which shall be confirmed to the Operators not less than 4 weeks in advance;

Maximum Interchange Time means at an OSI, the time allowed by the PAYG System following an Exit Validation at the OSI during which a PAYG Entry Validation at the OSI is regarded as continuing the previous Rail Journey;

Maximum Journey Time means the time allowed by the PAYG System following an Entry Validation by which a Rail Journey must be completed. The maximum time allowed for a Rail Journey varies as set out in Schedule 3. Where the time between an Exit Validation and an Entry Validation is greater than the Maximum Journey Time, the validations are assumed not to be part of a single Rail Journey;

Minimum Retail Service means the provision by an Operator of a facility to add PAYG Value at:-

- (a) at least 1 customer operated ticket vending machine at 90% of that Operator's Operator Stations where RSP accredited customer operated ticket vending machines are installed; and
- (b) at least 1 customer operated ticket vending machine in every 3 ticket machines, where an Operator Station contains 3 or more customer operated ticket vending machines.

For this purpose, customer operated ticket vending machines, shall include any customer operated ticket vending machines installed by TTL;

Mixed Travel means as set out in Schedule 2 Part 2j;

Mixed Travel Entry Charge shall have the meaning given in Schedule 2 Part 2j;

Mixed Travel Entry Threshold means the PAYG Balance required if an Entry Validation is to take place when a valid Travelcard is also present on the item of smartmedia concerned;

Mixed Travel Exit Charge shall have the meaning given in Schedule 2, Part 2j;

National Location Code (NLC) means a numeric identifier of a station as referenced in Schedule 3 Part 2 Tables 4 and 11;

Neutrality Test means as set out in Clause 6.3(c)(iii);

Nominated Provider means Cubic or any subsequent provider nominated by TTL;

Notice of Dispute means as defined in Clause 22.3;

OCOP means as defined in Schedule 17 paragraph 1.a. and as amended from time to time in accordance with this Agreement;

One Day Travelcard means a Travelcard valid for a period of not more than 28.5 hours;

Open-Access Operator means a person providing railway passenger services who:-

- (a) is not a Franchised Operator; and
- (b) has agreed to be bound by the provisions of the Ticketing and Settlement Agreement;

Operational Impact means a matter having an adverse or detrimental impact on the customers' experience of the operation, or resulting in an Operator having to take additional action to avoid such an adverse or detrimental impact on customers' experience;

Operator shall mean any person which is for the time being both:-

- (a) a Franchised Operator or an Open-Access Operator; and
- (b) a member of the Scheme and a party to this Agreement (whether by being an original signatory or by executing a deed of adherence in the manner set out in this Agreement).

At the date of this Agreement such persons are as listed in Schedule 12, such list to be amended from time to time to incorporate any new Operators but shall not include any member of the TTL Group nor any TTL Third Party;

Operator Launch means in respect of each Operator, when PAYG is first introduced as a means of payment for travel on that Operator's Services:

- (a) under the terms of this Agreement; and
- (b) in relation to some or all of the Operator's Services; and
- (c) using the PAYG Fares as defined in Schedule 3 and as are allocated and settled using the arrangements defined under Clause 10 and Schedule 7

occurring on either the PAYG Launch Date or such later date as may be agreed in accordance with paragraph 3 of Schedule 13 and disregarding for this purpose any acceptance of PAYG under any Existing PAYG Acceptance Arrangements;

Operator Launch Date means the date on which Operator Launch occurs for the applicable Operator;

Operator's Services means those rail Passenger Transport Services provided by an Operator within the PAYG Area (and "Operators' Services" shall mean all such services provided by the Operators);

Operator Station(s) means the stations shown in Schedule 3 Part 2 Table 15 as being Operator Stations;

ORR shall mean the Office of Rail Regulation established pursuant to the Railways and Transport Safety Act 2003;

OSI means the designated pairs of stations shown in Schedule 3 Part 2 Table 11 where a customer, having exited the paid area at one of the stations then re-enters the paid area at the other station within the relevant Maximum Interchange Time (and within the relevant Maximum Journey Time), and is then deemed to be continuing the same end-to-end Rail Journey;

OSI Entry Validation has the meaning given in Schedule 2 Part 2n (1);

OSI Exit Validation has the meaning given in Schedule 2 Part 2n (1);

Other Agreement means as set out in Clause 22.17(b);

Outgoing Operator means as set out in Schedule 15 paragraph 2.1;

Oyster means as set out in Clause 6.3(a) and as set out in Schedule 18;

Pass Back means as set out in Schedule 3 Part 2 Table 10;

Passenger Transport Service means a fare paying public transport service;

PAYG (Pay As You Go) means the arrangements under which passengers can load funds onto TTL Smartmedia for subsequent use as a means of payment for journeys on certain Passenger Transport Services in and around Greater London utilising the PAYG System;

PAYG Adjustment means a change to a PAYG Balance made by station staff to resolve charging issues raised by holders of TTL Smartmedia, generally in relation to Incomplete Journeys;

PAYG Area means collectively the rail stations included within the Zones;

PAYG Assumptions means as set out in Schedule 7 Part 2 paragraph 3.3;

PAYG Balance means the monetary amount (positive or negative) held by TTL in relation to an item of TTL Smartmedia, as recorded electronically on the TTL Smartmedia or in the PAYG System;

PAYG Capped Bus Journey means as set out in Schedule 16 paragraph 5(ii);

PAYG Capped Rail Journey means as set out in Schedule 16 paragraph 5(i);

PAYG Equipment means the equipment provided by TTL under the Implementation Agreements (where applicable) and/or such other equipment located at or to be located at Operator Stations and approved by TTL for the purpose of accepting PAYG and for the purpose of this definition as at the date of this Agreement:-

- (a) excluding, unless otherwise agreed, station control units, gates (other than gate readers comprising the 'target' device and the related master module within the gate), applicable circuit breakers and isolators, and all power cabling (other than that power cabling installed pursuant to an Implementation Agreement); and
- (b) including, unless otherwise agreed, Gate Readers, station computer(s) located at each station for the purposes of PAYG ("Station Computer"), the Communications Hub, Validators, data-cabling (between WAN point of presence to Station Computer, Station Computer to gates, and Station Computer to the station control unit), and the wide area communications network link through which data is transmitted between the relevant Operator Stations and TTL's central data processing system;

PAYG Journey means a journey for which PAYG is used in whole or in part as the means of payment;

PAYG Late Transaction has the meaning given to it in the Amended Clearance Agreement;

PAYG Launch means when some or all of the Operators first accept PAYG as a means of payment for travel:

- (a) under the terms of this Agreement;
- (b) in relation to all or some of those Operator's Services;
- (c) using the PAYG Fares as defined in Schedule 3 and are allocated and settled using the arrangements defined under Clause 10 and Schedule 7

and disregarding for this purpose any acceptance of PAYG under any Existing PAYG Acceptance Arrangements;

PAYG Launch Date means the date on which PAYG Launch occurs;

PAYG Marketing Material means as set out in Schedule 10 paragraph 3(a);

PAYG Mixed Apportionment Matrix means the matrix to be developed pursuant to Part 2, paragraphs 2.15 to 2.17 of Schedule 7;

PAYG Mixed Journey means a Rail Journey part of which is within the validity of a Travelcard residing on the TTL Smartmedia concerned, and where PAYG is used as the means of payment for the remainder of the journey;

PAYG Only Apportionment Matrix means the matrix to be developed pursuant to paragraphs 2.3 to 2.14 of Part 2 of Schedule 7;

PAYG Only Journey means a Rail Journey for which PAYG is the sole means of payment;

PAYG Operating Requirements shall mean the requirements to be complied with by any party accepting PAYG, as detailed in Schedule 5;

PAYG Price Cap means, in relation to Complete Journeys made on the services set out in Clause 3.1 within a 24 hour period beginning at the start of the Traffic

Day, the maximum amount of PAYG Value Expended that will be deducted from the PAYG Balance, as set out in Schedule 2 Part 2h (1);

PAYG Reconstruction has the meaning given to it in the Amended Clearance Agreement;

PAYG System means the central data processing system, station systems, bus systems, revenue collection media together with the facilities for providing customers with such media, and associated accounting and information systems (which for the avoidance of doubt includes the links between such systems, as applicable) managed and/or procured by TTL to provide a secure means of payment for Passenger Transport Services in each case, as the same exists at the PAYG Launch Date, and as it may be amended thereafter in accordance with the Change Control Procedure (where it applies) and through the performance of this Agreement, any Implementation Agreement and any Services Agreement. For the avoidance of doubt, for the purposes of this Agreement the PAYG System will:-

- (a) include the PAYG Equipment and the wide area communications network link through which data is transmitted between the relevant Operator Stations and TTL's central data processing system;
- (b) exclude any system or equipment which an Operator may require for the purposes of retailing PAYG if it exercises the option to do so pursuant to Clause 12 and Schedule 8 of this Agreement (with the exception of the central data processing system to the extent that it is used in accordance with the provisions of this Agreement for the purposes of such retailing in conjunction with any such system or equipment utilised by that Operator);

PAYG Uncapped Fare means, in relation to a PAYG Journey, the PAYG fare as set out in Schedule 3 Part 2 Tables 1-3, that would apply for that journey, including any discounts specified in Schedule 3 Part 2 Table 8, but excluding the effects of capping set out in Schedule 3 Part 2 Table 6;

PAYG Uncapped Rail Journey means as set out in Schedule 16 paragraph 5(iii);

PAYG Value Added means the amount paid to TTL or its agents by or on behalf of a holder of TTL Smartmedia to make PAYG travel services available;

PAYG Value Expended means the amount deducted from the PAYG Balance in respect of a journey made using PAYG;

Pearl Device means the card interface device (including hardware and software) known at the date of this Agreement as the "Pearl" and developed by Cubic for incorporation into certain ticket vending machines;

Pearl Device Agreement means an agreement in the form described in paragraph 18(f)(vi) of Schedule 8;

Personal Data means as defined in section 1(1) of the DPA. For the avoidance of doubt, in relation to TTL Personal Data, this does not include Magnetic Gate Data;

Phase 1 Operator means an Operator which is already accepting PAYG under an Existing PAYG Acceptance Agreement as at the date of this Agreement, but only in respect of those of the Operator Stations at which PAYG is so accepted;

Primary Sub-Route means as set out in Schedule 7 Part 2 paragraph 2.9;

Processing means as defined in Section 1(1) of the DPA;

Rail Journey means a PAYG Journey made using the services of any of LUL, DLR, London Overground or the Operators' Services;

Reference Period means as set out in Schedule 7 Part 2 paragraph 2.15;

Related Dispute means as set out in Clause 22.15(a);

Relevant Journey means as set out in Schedule 16 paragraph 5;

Relevant Operator Services means for the purposes of Clause 3.1(b), those rail Passenger Transport Services provided by the Operator from time to time: -

- (a) within the PAYG Area;
- (b) which call at Operator Stations or TTL- controlled Stations; and
- (c) on which Travelcards are accepted, provided that if during the term of this Agreement the Parties cease to be party to the Travelcard Agreement, references to services on which Travelcards are accepted shall mean: -
 - (i) services on which a product which is agreed or determined for the purposes of this Agreement to be the successor to the Travelcard is accepted; or
 - (ii) where there is no such successor product, each service on which Travelcards were accepted immediately prior to their discontinuance or the equivalent service(s) from time to time, to the extent and for so long as the geographical coverage of that service remains consistent with the geographical coverage of the Passenger Transport Services in respect of which TTL is required to secure acceptance of PAYG pursuant to Clause 3.1(a);

Required Change means as set out in Schedule 9 paragraph 5;

Required Date means the date by which an obligation has to be met to ensure the achievement of PAYG Launch on the then Anticipated PAYG Launch Date as set out in the Key Milestone Plan and/or the launch and reversal plan produced in accordance with paragraph 2 of Schedule 13, (as each may be amended from time to time in accordance with Schedule 13);

Retail Prices Index means the General Index of Retail Prices which is published in the United Kingdom in the Monthly Digest of Statistics by the Office for National Statistics or any replacement of it;

Route means, in relation to a Complete PAYG Journey, the assumed route of travel between the station at which the Entry Validation takes place (origin station) and the station at which the Exit Validation takes place (destination station) as deduced by the associated Intermediate Validation Routeing Record assuming that the PAYG System works as intended with all gates and validators operational and passengers correctly validating their TTL Smartmedia at gates and validators. A given Route may not completely define the path of a journey through the rail network as there may be more than one such path which is consistent with the Intermediate Validation Routeing Record;

Routeing Validator means a validation device provided at the stations listed in Schedule 3 Part 2 Table 5 as being Fares Nodes to enable the route taken in the course of a PAYG Journey to be recorded electronically;

RSP shall mean Rail Settlement Plan Limited (registered number 03069042) whose registered office is as 40 Bernard Street, London WC1N 1BY;

Same Station Exit Journey means a PAYG Only Journey consisting of an Entry Validation followed by an Exit Validation at the same station within the Same Station Exit Time;

Same Station Exit Time shall have the meaning given in Schedule 2 Part 2m (4) (i);

Same Station Time shall have the meaning given in Schedule 2 Part 2m (4) (ii);

Same Station Re-Entry Time shall have the meaning given in Schedule 2, Part 2 m (5);

Sample means as set out in Schedule 16 paragraph 9;

Sample Category means as set out in Schedule 16 paragraph 12;

Schedule 16 Commencement Date is as defined in Clause 16.8(c);

Schedule 16 Methodology means as set out in Clause 16.8(a);

Scheme shall mean the ATOC PAYG scheme subsisting from time to time in which each Operator is required to participate in order to accept PAYG;

Secretary of State means the Secretary of State for Transport;

Services Agreement means an agreement between TTL and an Operator for the provision of TTL Services in the form required by Schedule 4;

Settlement Date has the meaning given to it in the Amended Clearance Agreement;

Settlement Period has the meaning given to it in the Amended Clearance Agreement;

Shared Risk Communication Costs means: -

- (a) the "Ongoing costs" component only of those costs in the table at Part B of Appendix 3 to Schedule 4 of this Agreement which are described as "WAN Communications (Cable & Wireless element - stations)", "WAN Communications (Cable & Wireless element - back office)" and "WAN Communications (non-Cable & Wireless element - stations)"; and
- (b) in the case of a termination of this Agreement pursuant to Clause 18.1(b), the amount of any cancellation charges or other costs (as such other costs are mitigated by TTL) payable by TTL on the termination of the contract(s) between TTL and its sub-contractor(s) in respect of the provision of those "WAN Communications" items described in (a) above;

Station Computer means as set out in the definition of "PAYG Equipment";

Station Pair has the meaning given in Schedule 7 Part 2, paragraph 2.2;

Subsequent Dispute means as set out in Clause 22.15;

subsidiary shall have the meaning ascribed thereto by Section 736 and Section 736A of the Companies Act 1985 until 30th September 2009, and Section 1159 and Schedule 6 of the Companies Act 2006 from 1st October 2009 (in each case as amended from time to time);

Successor Branding means as set out in Clause 6.3(c)(iii);

Successor Operator means a person who:-

- (a) becomes an Operator pursuant to the process for admission of Operators in Clause 3.6; or
- (b) is an existing Operator

in circumstances where it is immediately replacing and taking over from an existing Operator in the provision of some or all of the Operator's Services or the operation of the Operator's Stations;

TCL means Tramtrack Croydon Limited or such other person which operates from time to time the Croydon Tramlink network (as varied from time to time) as or on behalf of a member of the TTL Group;

TfL-NR Interchange Time shall be a station-specific estimate of the interchange time between TTL Rail Services and Operators' Services (and vice versa) for journeys involving such interchanges as specified in Schedule 3 Part 2 Table 4;

Third Party Dispute means as set out in Clause 22.17(b);

Through Ticketing Agreement shall mean the agreement between the Parties to this Agreement and others (and any subsequent such agreement) governing the arrangements between them in relation to certain combined tickets (other than Travelcards);

Ticketing Services Provider means Transaction Systems Limited (TranSys) and any successor supplier(s) to TTL, or any member of the TTL Group, of goods and services provided at the date of this Agreement by TranSys (and which shall include TTL, or any member of the TTL Group where it or they provide such goods and services to themselves or each other);

Ticketing and Settlement Agreement shall mean the agreement governing arrangements between the Operators and others for the operation of passenger transport services and the apportionment and settlement between them of revenue from such operation;

Total Daily Expenditure means as set out in Schedule 16 paragraph 5;

Traffic Day means that part of a day during which passenger services are provided or, where services are provided continuously, a 24 hour period commencing as defined in Schedule 3 Part 2 Table 10;

Transport for London (or 'TfL') means Transport for London (a statutory corporation established under the Greater London Authority Act 1999);

Travelcard Agreement shall mean the agreement between London Regional Transport and certain Parties to this Agreement and others dated 15th October 1995 and 31 October 2005 (as amended from time to time) governing the arrangements between them in relation to the issuing and acceptance of Travelcards;

Travelcards shall mean tickets (available on their own or as an additional element to other tickets issued for services not covered by the Travelcard Agreement) valid for travel on the services specified in the Travelcard Agreement in accordance with the Zonal availability appearing on the tickets;

TTL Charges means the charges in respect of the TTL Services payable by an Operator in accordance with Schedule 4 of this Agreement and of Schedule 4 of an Operator's Services Agreement;

TTL-controlled Station means a station within the PAYG Area which is not an Operator Station;

TTL Group means TfL and all its subsidiaries from time to time together with Crossrail Limited (company number 04212657) and reference to any "member of the TTL Group" shall be construed accordingly;

TTL Marks means as set out in Clause 6.3(b);

TTL Rail Services means the services of LUL and DLR but excluding those of London Overground;

TTL Services means those services described in Schedule 4 Part 2;

TTL Smartmedia means smartcards or other devices authorised by TTL for use by passengers for the purpose of making PAYG Journeys;

TTL Third Party shall mean any operator of Passenger Transport Services within the Zones (other than a TTL subsidiary or an Operator) under contract to, or authorised by TTL or a member of the TTL Group to operate such services;

TVM means ticket vending machine;

TVM Retail Connections means connections established by TVM suppliers with the central system of the PAYG System for the transmission to and from that central system of TVM Retail Transaction Data;

TVM Retail Transaction Data means transaction data relating to the retailing of PAYG Added Value by a TVM;

User Day means as set out in Schedule 16 paragraph 7;

Validator means a PAYG validation device not attached to a ticket gate;

Value for Money (VFM) means the optimum combination of whole-life cost and quality to meet a requirement as assessed at the time of procurement and taking into account any relevant constraints.

VAT shall mean value added tax as provided for in the Value Added Tax Act 1994 and any other tax calculated by reference to turnover or value added in effect in the United Kingdom from time to time;

Void Entry means a PAYG transaction undertaken at a station retail facility whereby the Entry Charge associated with an Entry Validation is refunded to the customer;

Void Exit means a PAYG transaction undertaken at a station retail facility whereby the Exit Validation is cancelled and the associated change to the PAYG Value Expended and to the PAYG Balance is reversed;

Zone shall mean one of those areas into which the London area is notionally divided for the purpose of the pricing of PAYG Journeys, as more particularly set out in Schedule 3 Part 1 and **Zonal** shall be construed accordingly.

SCHEDULE 2

Key Features of PAYG

The features, functions and outputs described in this Schedule 2 Parts 1, 2 and 3 comprise the Key Features of PAYG.

Introduction

- (i) TTL undertakes that from the PAYG Launch Date, the PAYG System (including the PAYG Equipment) and TTL Services will contain, perform and enable the Key Features. For the avoidance of doubt, where any part of this Schedule 2 requires agreement between the Parties or determination pursuant to Clause 22, then TTL's undertaking shall be that from the PAYG Launch Date, the PAYG System (including the PAYG Equipment) and TTL Services will contain, perform and enable the Key Features as such are agreed by the Parties pursuant to this Schedule or determined pursuant to Clause 22.
- (ii) This Schedule is not subject to change under the Change Control Procedure.
- (iii) TTL undertakes to consult with the Operators on the details and progress of the technical work to incorporate the Key Features into the PAYG System.

1. Revenue Items

- a. The PAYG System shall without exception, correctly apply PAYG fares, charges and business rules as set out in this Schedule 2 and Schedule 3 to this Agreement and in accordance with the Amended Clearance Agreement.
- b. The PAYG System shall capture and correctly process, in accordance with Schedule 7, all PAYG transactions and shall calculate correctly the PAYG revenue to be apportioned to the Parties in accordance with Clause 10, Schedule 7 (and Schedule 16, once implemented, as such is referenced in Schedule 7) and in accordance with the Amended Clearance Agreement.
- c. TTL shall provide to RSP the information specified in the Amended Clearance Agreement in the format and to the timetable prescribed therein. For the avoidance of doubt, this information includes but is not restricted to a daily summary of all PAYG transactions with an Operator or London Overground travel component i.e. all transactions where an Operator or London Overground is due a share of the revenue in accordance with Schedule 7 (and Schedule 16, once implemented, as such is referenced in Schedule 7).

2. Fares Items

- a. The PAYG System shall support three Categories of PAYG fares (referred to in this Schedule 2 and Schedule 3 as "Category" or "Categories"). Maps 1 and 2 in Schedule 3 Part 1 define for which end-to-end Rail Journeys these three Categories of PAYG fares shall apply. As further detailed on the Maps:
 - Category 1 PAYG fares shall be set by the Operators. These fares will normally apply for journeys where the Operators control the setting of non- PAYG fares.
 - Category 2 PAYG fares shall be set by TTL. These fares will normally apply for journeys where TTL controls the setting of non- PAYG fares.

- Category 3 PAYG fares shall be set by agreement between TTL and the Operators. These fares will normally apply for journeys where neither TTL nor the Operators exclusively control the setting of fares.

Category 2 fares shall include PAYG fares for journeys made using TTL bus and Tram services.

- b. The fares in each of the three Categories will reflect the Zones travelled through, the time of day and day of week, and will be detailed in Schedule 3 Part 2 Tables 1 to 3, with any exceptions shown in Table 7. The route assumptions for fare setting purposes (and hence the Zones travelled through):
 - (i) will be determined by the Operators in the case of Rail Journeys where the revenue for the journey concerned is due solely to the Operators;
 - (ii) will be determined by TTL in the case of Rail Journeys where the revenue for the journey concerned is due solely to TTL;
 - (iii) otherwise, will be agreed between the Parties (see also Part 2 (e) and (g) below) who will cooperate to reach such agreement. Any failure to agree will be resolved in accordance with Clause 22.
- c. In the event that agreement cannot be reached between TTL and the Operators, Category 3 fares shall be:-
 - (i) the sum of the Category 1 fare for the relevant zonal combination and fares level (see Part 2 (i) below) for the complete journey plus the Category 2 minimum fare at that fares level for a Rail Journey, subject to:
 - (ii) where Category 1 and Category 2 fares can be combined to cover a through journey at a fare lower than the Category 3 fare described in (i), the Category 3 fare for the journey concerned shall be the sum of the relevant Category 1 and Category 2 fares for the journey. The Parties will work together to minimise the number of Rail Journeys on which fares are set at less than the Category 3 Fares detailed in Schedule 3 Part 2 Table 3.
- d. In the event of changes to the network or to the scope of services operated by any of the Parties, the Parties will co-operate and act reasonably to agree all necessary amendments to the PAYG System and the PAYG fares to meet the fare-setting timetable as set out in Schedule 3. In the event that agreement between the Parties cannot be reached, then notwithstanding any other provision of this Agreement, the provisions of Clause 22 will apply to determine the amendments to be made to the PAYG System and/or the Fares as the case may be.
- e. Where a Rail Journey is possible by alternative routes for which different PAYG fares apply because different Zones or fare Categories are involved, the fare charged shall reflect any validations at Fares Nodes in the course of the journey. At the stations and specified locations defined as Fares Nodes in Schedule 3 Part 2 Table 5, the specified number of Routeing Validators will enable PAYG users to record the routeing they have adopted.

- f. To determine the allocation to the Parties of the fares revenue associated with Rail Journeys of the type described in Part 2(e) above, Intermediate Validations will be used as further detailed in Schedule 7 (Revenue Apportionment). In particular explicit account will be given to a maximum of the first four Intermediate Validations for any Rail Journey.
- g. Where the provisions of Part 2 (e) above do not enable the fare for a Rail Journey to be uniquely defined, the fare to be charged for a Rail Journey will be agreed between the Parties in accordance with this paragraph. This fare will be for one of the routes for the journey that appear possible after taking into account any validations at Fares Nodes made in the course of the journey. Unless otherwise agreed between the Parties, the lowest applicable fare will be charged, except where it is considered that the proportion of passengers who would choose the lowest fare route would be less than 10%, having regard to the differences in travel and waiting times involved.
- h. **Good Value**

The PAYG System will apply Good Value rules in setting adult rate fares and charges for PAYG Journeys as follows:

- 1) daily PAYG Price Caps will apply as specified in Schedule 3 Part 2 Table 6. These will be set equal to all One Day Travelcard ticket prices, but may be lower than such prices;
 - (a) in the case of caps within Zones 1-6, if agreed by the Parties;
 - (b) in the case of caps extending beyond Zones 1-6 but not including Zone W, if so determined by TTL;
 - (c) in the case of caps involving Zone W, if so determined by the Operator of Watford Junction.
- 2) PAYG single fares will be no more than the cash single fares for the same journeys;
- 3) PAYG fares for return journeys will be no more than the cheapest available cash return fares for the same journeys.

If at any time during the term of this Agreement the Parties shall cease to be parties to the Travelcard Agreement or any successor agreements under which they agree the price of One Day Travelcards, then: -

- 1) the Parties shall nonetheless seek to agree Good Value Price Caps; and
- 2) if the Parties fail to agree, the Price Caps shall increase at the start of January each year in line with the annual increase in the Retail Prices Index over the year to the previous July.

Notwithstanding the above, any Operator may offer special promotional fares (not using PAYG) which are cheaper than PAYG and will notify TTL and the other Operators of such fares from time to time.

- i. **Charging Time-bands**

The PAYG System shall support fares for Rail Journeys that vary depending on (a) when the Entry Validation associated with an end-to-end journey takes place; and (b) the direction in which the journey is made (towards or away from Zone 1). More particularly, direction means whether, following the Entry Validation, the next Zone of travel through which the journey passes has a lower or higher number than the Zone where the Entry Validation was made. If the next Zone has a lower number the journey is classified as "towards Zone 1"; if the next Zone has a higher number the journey is classified as "away from Zone 1".

Fares for Rail Journeys within a single Zone shall not be variable by direction.

Two levels of fares (peak; and off-peak) will be available for Rail Journeys. These two fare levels will be capable of being applied to up to 5 time bands in the course of a day as detailed in Schedule 3 Part 2 Table 7.

From no later than 12 months after the PAYG Launch Date, and subject to all technical and commercial issues being addressed and resolved, including the implications for Category 3 fares, the PAYG System shall permit at least three fare levels to be set for Rail Journeys (peak; shoulder peak; and off-peak) and will also permit an increase to nine in the number of time bands available during the day. The Parties undertake to make all reasonable endeavours to resolve these issues within 12 months of the PAYG Launch Date.

Unless the Parties agree otherwise, there shall be no extension to the directional functionality of the PAYG System, within the 12 month period from the PAYG Launch Date.

j. Mixed Travel

Holders of TTL Smartmedia that contain a Travelcard will be able to use PAYG to make Rail Journeys where the Travelcard is not valid ("Mixed Travel") and in particular, to make Rail Journeys between stations in the Zones covered by their Travelcard and stations where PAYG is valid beyond the Zones covered by their Travelcard. More particularly, where Travelcards are held on TTL Smartmedia:

- Rail Journeys commencing at a station outside a Travelcard's validity will be permitted provided an Entry Validation has taken place;
- Rail Journeys commencing within the Travelcard's Zones of validity and involving out of Zone travel only on TTL services will be permitted provided an Entry Validation has taken place;
- Rail Journeys commencing at a station within the Travelcard's Zones of validity involving out of Zone travel on the Operators' services where PAYG is accepted will be permitted provided an Extension Permit as further described below is present and an Entry Validation has been made.

The fare for a Rail Journey which is partly covered by a valid Travelcard will be calculated as the appropriate PAYG fare for the services used in the Zones where the Travelcard is not valid.

Values for Entry Charges and Exit Charges for Mixed Travel (“Mixed Travel Entry Charge”, and “Mixed Travel Exit Charge”) are detailed in Schedule 3 Part 2 Table 9.

k. Extension Permits

The PAYG System will enable Extension Permits (EPs) to be available from each of its devices retailing PAYG Value Added, and will also identify the presence of an EP and permit an EP to be cancelled at any retailing device.

Extension Permits will only be placed on TTL Smartmedia where the PAYG Balance meets or exceeds a specified amount (the “**Extension Permit Minimum Amount**”) as set out in Schedule 3 Part 2 Table 9. Unless the Parties agree otherwise, this amount will be the highest level of the Category 3 fare for one Zone.

Where an Extension Permit is present, an Entry Validation within the Travelcard’s Zones will result in a Mixed Travel Entry Charge. An Entry Validation will only take place if the PAYG Balance is not less than the Mixed Travel Entry Threshold (see Part 2 (m) below) applying in these circumstances.

The PAYG Equipment at the Operator Stations will be capable of identifying TTL Smartmedia holding Travelcards that are out of Zone and where Extension Permits are not present or Entry Validations have not been made. Where such TTL Smartmedia are identified:

- the PAYG System will apply a Mixed Travel Exit Charge or may prevent exit in the case of gatelines;
- the identifying validation device will provide a specific audible indication.

Detailed operating arrangements and related terms and conditions for Extension Permits are set out in Table 1 attached to this Schedule 2.

Printed ticket extensions will be maintained by the Parties and will be the only mechanism for extending travel beyond the valid Zones for holders of printed ticket Travelcards. Such printed ticket extensions will also be available for travel to users of TTL Smartmedia which hold Travelcards.

l. PAYG Fare Discounts

- 1) The PAYG System will include the discount entitlement for holders of National Railcards specified in Schedule 3 Part 2 Table 8.
- 2) The PAYG System will support Privilege Travel facilities for the relevant staff and their dependents and will recognise the differences in Privilege Travel entitlements enjoyed by different categories of staff.
- 3) The Parties agree that holders of New Deal identity cards (presently issued by Jobcentre Plus) will be charged half the relevant adult PAYG fare.
- 4) Subject to all safety, statutory and franchise obligations being met, the Operators agree to negotiate with TTL on a no net loss basis, with a view to offering PAYG discounts to young people or other specified groups that are consistent with, though not necessarily identical to, those offered on

TTL services. For the avoidance of doubt this agreement to negotiate does not extend to the offer of free travel to unaccompanied young people.

m. Entry Charges, Exit Charges and related items

Subject to the constraints described below, Entry Charges and Exit Charges shall be determined by the Operators in the case of Operator Stations and by TTL in the case of TTL-controlled Stations.

The PAYG System will, unless otherwise agreed by the Parties, apply the following conditions with respect to Entry Charges, Exit Charges and related items (specific values shall be as set out in Schedule 3 Part 2 Table 9):

- 1) Where a Travelcard is not present:
 - i) the Entry Threshold at a station will either be the minimum PAYG fare prevailing at that station at the time of entry or the difference between the PAYG Value Expended on PAYG Journeys that day and the Daily Cap applying if no additional Zones are used if this is less;
 - ii) in the case of Operator Stations Entry Charges and Exit Charges will not be less than the Zone 1-6 Category 1 fare in force at the moment of validation. In the case of TTL-controlled Stations, Entry Charges and Exit Charges will not be less than the Zone 1-6 Category 2 fare;
 - iii) at any station, Entry Charges and Exit Charges shall not exceed the peak Zone 1-6 Category 3 fare or the peak Category 3 fare from that station to Zone 1 if this is higher, except at a station served by a service charging premium fares where the Parties may agree to apply higher Entry Charges and Exit Charges.
- 2) Where a Travelcard is present:
 - i) when a Rail Journey commences inside the Travelcard's Zones the Mixed Travel Entry Threshold will be zero. Unless an Extension Permit is present, the Mixed Travel Entry Charge will also be zero;
 - ii) when a Rail Journey commences inside the Travelcard's Zones and an Extension Permit is present the Mixed Travel Entry Charge shall be as for a Rail Journey commencing outside the Travelcard's Zones as defined in (ii) below;
 - iii) equivalent conditions to those under 1 (ii) and (iii) above shall apply when a Rail Journey commences or finishes outside the Travelcard's Zones regardless of whether an Extension Permit is present. However, for the Mixed Travel Entry Charge and the Mixed Travel Exit Charge, the Zone 1-4 PAYG fare shall apply rather than the Zone 1-6 PAYG fare;
 - iv) the Mixed Travel Entry Threshold in case (iii) above shall either be the minimum PAYG fare prevailing at that station at the time of entry or the difference between the PAYG Value Expended on PAYG Journeys that day and the Daily Cap applying if no additional Zones are used if this is less.

- 3) Entry Charges and Exit Charges for children and other discount fare groups will be subject to the rules above but related to the child fares or discount fares in force, as further listed in Schedule 3 Part 2 Table 8.
- 4) Following an Entry Validation at a station, an Exit Validation at that same station:
 - i) will be disregarded and the Entry Charge will remain in place for PAYG charging purposes provided the Exit Validation is within the period of time (the "*Same Station Exit Time*") defined in Schedule 3 Part 2 Table 10;
 - ii) will result in a minimum PAYG fare being charged (unless the Parties agree otherwise, in which case any exceptions will be recorded in Schedule 3 Part 2 Table 10) if the Exit Validation occurs after the Same Station Exit Time but before the time (the "*Same Station Time*") after which both an Entry Charge and an Exit Charge will be incurred.

Where passengers have incurred an Entry Charge or a PAYG fare, having exited prior to the Same Station Time, they shall be entitled to have the Entry Charge or the PAYG fare cancelled, either by TTL centrally or, provided the transaction remains on the TTL Smartmedia item held by the passenger, at a TTL Smartmedia enabled retailing device at a station ticket office.

- 5) Following an Entry Validation and Exit Validation within the Same Station Exit Time, for a prescribed period of time, a further Entry Validation within a specific time following the Exit Validation at the same station (the "*Same Station Re-entry Time*") or at a different station (the "*Different Station Re-entry Time*"), may supersede the original Entry Validation, cancelling the original Entry Charge. The prescribed values of Same Station Re-entry Time and Different Station Re-entry Time, which may vary depending on the station previously entered, will be as set out in Schedule 3 Part 2 Table 10.
- 6) Where passengers appear to have incurred expense which should not normally be incurred as a result of difficulties in making validations due to service disruptions, congestion or station operational problems, TTL shall be empowered on behalf of the Operators:
 - (a) to complete Entry Only journeys automatically on a selective basis;
 - (b) to cancel Entry Charges and fares associated with Entry and Exit Validations at the same station within the Same Station Exit Time or the Same Station Time;
 - (c) to arrange for batches of refunds to be made in arrears to PAYG users who appear to have been adversely affected by operational problems (as referred to above) and, as a result, have been unable either to validate their Rail Journeys fully or to exit within the Maximum Journey Time.

TTL shall agree with the Operators: the rules that TTL will apply to auto-complete journeys on the Operators' Services and the circumstances in which they will be applied; and the criteria that TTL will employ to make batch refunds. Such rules and criteria will be recorded in OCOP. If the

Parties are not able to agree then TTL shall not apply auto-completion to journeys on Operator services.

- 7) Where journeys are auto-completed, as under 6a above the fares paid for the Completed Journeys will be allocated and settled using the rules and procedures set out in Schedule 7 as in the case of normal Completed Journeys.
- 8) Where Entry Charges are cancelled, as under 6b above, Incomplete Journey revenue relating to these charges and the associated Void Entry will be treated as set out in Schedule 7.
- 9) Where batch refunds are made, as under 6c above or good-will refunds made to customers by TTL staff, including for the avoidance of doubt TTL station staff and TTL help desk staff, the cost of the refunds will be borne by TTL and no adjustments to allocated revenue will be made except as described in 10 below.
- 10) Where a major incident disrupts the train service provided by an Operator, the value of any ensuing adjustments to PAYG Balances made pursuant to 6a, 6b, or 6c above shall be borne by that Operator. In such circumstances, refunds will be made either using specific rules requested by the Operator for the particular incident or in accordance with general rules notified by TTL and agreed by the Parties and recorded in OCOP.
- 11) The Parties agree to cooperate with the aim of setting common Entry Charges and Exit Charges at all stations that accept PAYG which are simple for passengers to understand and effective in deterring fraud.

n. **Out of Station Interchanges (OSIs)**

The PAYG System shall accommodate the following features:

- 1) Out of Station Interchanges (OSIs) arise where passengers must leave the "paid area" at a station (where a valid ticket or TTL Smartmedia with a valid Entry Validation is required) in order to interchange between services to continue a Rail Journey. A pair of validations (an "*OSI Exit Validation*" and an "*OSI Entry Validation*") will normally be made on leaving and re-entering the paid area.
- 2) Provided a subsequent Exit Validation takes place at another station, resulting in a complete end-to-end Rail Journey, any validations at an OSI will be disregarded for fare charging purposes except in so far as they assist in determining the routeing associated with the end-to-end Rail Journey as described in Part 2 (e) above.
- 3) At such OSI locations as the Parties may agree, for fare calculation purposes only, the PAYG System will permit the Exit Validation at the OSI to be omitted provided that an Entry Validation at a gateline is made at the OSI, and an Exit Validation is made subsequently.

TTL undertakes to investigate the scope for enhancing the PAYG System to permit, at any OSI location agreed by the Parties, either (a) the OSI Exit Validation, or (b) the OSI Entry Validation to be omitted. TTL will discuss the results of this investigation with the Operators, agree a

reasonable way forward with them, and aim to implement any agreed changes no later than 18 months after the PAYG Launch Date.

Where a validation at an OSI is omitted, as described in this paragraph 3, then all the Fares Node Information associated with the OSI may not be captured by the TTL Smartmedia. In certain exceptional circumstances this will result in the fare charged for the end-to-end journey being different to that which would have been charged had the validation not been omitted. TTL undertakes to discuss with the Operators proposals to modify the PAYG System to remove this restriction and that of Exit gates starting Rail Journeys (see 4 (ii) (b) below), taking into account the benefits and costs involved. TTL will discuss the results of this investigation with the TOCs, agree a reasonable way forward with them, and aim to implement any agreed changes no later than 18 months after the PAYG Launch Date.

- 4) Schedule 3 Part 2 Table 11a lists the interchange locations where out of station (OSI) rules will operate, the associated Maximum Interchange Times, and Schedule 3 Part 2 Table 11b lists the locations at which an Exit Validation at the OSI may be omitted.

For a series of validations including an OSI to be regarded as an end-to-end Rail Journey, the relevant Maximum Journey Time parameters and Maximum Interchange Time parameters must be met as detailed in Schedule 3 Part 2 Table 11. For the avoidance of doubt:

- (i) if the time from the initial Entry Validation to the final Exit Validation subsequent to the OSI exceeds the Maximum Journey Time, two Incomplete Journeys will result;
- (ii) if the initial Entry Validation is omitted, subsequent validations will have the following impacts:-
 - (a) where the Exit Validation at the OSI takes place at a gate which is not at one of the locations agreed pursuant to paragraph (3) of this section n and listed in Schedule 3 Part 2 Table 11b, the Exit Validation at the OSI will result in an Exit Only Journey and an Exit Charge being applied. Any subsequent Entry Validation starts a new Rail Journey;
 - (b) otherwise for those locations listed in Schedule 3 Part 2 Table 11b and at Validators, the Exit Validation at the OSI will result in a new Rail Journey being started and an Entry Charge being applied.
- (iii) if the final Exit Validation only is omitted, the fare for the Complete Journey to the OSI will be charged, plus any increment over that fare represented by the Entry Charge at the station where the OSI Entry Validation occurs. These elements of the PAYG Value Expended will be allocated as appropriate for the Complete Journey and the Entry Only Journey.

o. Continuation Exits

At the locations set out in Schedule 3 Part 2 Table 12, where users may either

terminate a Rail Journey or may validate even though they intend to continue a Rail Journey, Continuation Exits will be applied by the PAYG System.

Where Continuation Exits are followed by an Exit Validation, within the agreed Maximum Journey Time parameters, the subsequent Exit Validation will be treated as concluding an end-to-end Rail Journey and the PAYG fare for that end-to-end Rail Journey will be applied.

p. Maximum Journey Time Parameters

The PAYG System shall accommodate Maximum Journey Times which will vary by time of day, day of week and origin and destination pair as indicated in Schedule 3 Part 2 Table 13, to accommodate longer and shorter Rail Journeys.

q. Fare Revisions

Provided that appropriate notice is given in accordance with Schedule 3, TTL undertakes to revise the PAYG fares and parameters (which for the avoidance of doubt includes restrictions, easements, time bands and caps) set out in Schedule 3 on three occasions in each calendar year. One of these occasions shall be the second of January. The other two dates shall be notified by the Operators to TTL before the end of October in the preceding calendar year.

r. Deposits

1) Deposits charged for TTL Smartmedia to be used for PAYG shall not exceed £5, indexed by reference to the value of the Retail Prices Index (by reference to the change in value at the relevant time from the value of the Retail Prices Index for June 2007), unless otherwise agreed by the Operators.

2) TTL shall be able to issue TTL Smartmedia for PAYG use without a deposit. For the avoidance of doubt, it is noted that where TTL Smartmedia go out of use with a negative balance, any potential revenue loss will be met by TTL, with the correct fare for the last journey made being allocated to the Operators in accordance with the terms set out in Schedule 7.

s. Performance of TTL Smartmedia

The performance of TTL Smartmedia and PAYG in ticketing gates at the Operator Stations in terms of passenger transit times, as indicated by typical passenger throughput, and reliability shall be no worse after the Operator Launch Date than the performance of those gates between the date of this Agreement and the Operator Launch Date.

t. Zone boundaries

PAYG Zone boundaries shall conform with the boundaries of Travelcard Zones 1-6. Any change to this position shall be subject to agreement by both TTL and the Operators collectively, subject to the following provisions.

Where pre-existing arrangements operate, PAYG Zones beyond Travelcard Zones 1 to 6 shall continue to be determined by TTL. In the case of any future extensions to PAYG, when no stations served by an Operator's Services

are included zone boundaries shall be determined by TTL. When a station served by Operator Services is included, a change will only be introduced by agreement between TTL and the Operator(s) responsible for determining fares from the relevant station(s) to London Terminals (or equivalent station).

3. Other items

TTL undertakes to implement the procedures outlined below before the PAYG Launch Date. The detailed form of the procedures and the rules and operational criteria to be applied will be subject to detailed consultation and agreement between the Parties and will be documented by TTL.

The Parties acknowledge that these operational solutions may be replaced by changes to the functionality of the PAYG System, subject to agreement between the Parties.

a. 24 Hour Travel

PAYG users travelling across the time threshold used to define PAYG days shall be charged the correct fares for their journeys.

TTL undertakes to identify any TTL Smartmedia holding both an Entry Only Journey and an Exit Only Journey that span 04:30 hours; to correct the charges made; and to allocate correctly the revenue finally collected between the Parties.

b. Avoidance of PAYG overcharges when journey times are prolonged as a result of service disruption

When services are disrupted PAYG users shall be charged the correct fares even when the normal Maximum Journey Time and or Maximum Interchange Time parameters have been exceeded as a result of the disruption.

TTL undertakes to identify any TTL Smartmedia holding both Entry Only and Exit Only PAYG Journeys that appear likely to be the result of disrupted services; to correct the charges made consistent with that analysis; and to allocate correctly the revenue finally collected (as so corrected) between the Parties.

c. Avoidance of PAYG overcharges when alternative bus services are used as a result of railway service disruptions

When railway services are disrupted, passengers needing to exit stations and board alternative bus services may be charged for Entry Only Journeys or for an Entry Validation followed by an Exit Validation at the same station ("**Same Station Exit**"). Subject to the agreement with each relevant Operator or Operators of the relevant detailed form of the procedures and the rules and operational criteria to be applied, TTL undertakes to identify any TTL Smartmedia holding Entry Only Journeys or Same Station Exits followed by bus boarding validations that are considered likely to be due to railway service disruption and to cancel the charges relating to the associated Entry Only Journey or Same Station Exit. When charges are cancelled in this way, revenue relating to the Rail Journey shall become zero.

Schedule 2 Table 1: Logic and Parameters that apply once an Extension Permit (EP) is placed on an item of TTL Smartmedia containing a valid Travelcard.

	Initial validation inside Travelcard Zones?	Outcome assuming Mixed Travel Entry Threshold condition is met and Mixed Travel Entry Charge is applied
Initial Validation is Entry at a Gateline or occurs at a Passenger Validator	Yes	<p>Complete PAYG Mixed Journey if a subsequent Exit Validation occurs inside the PAYG area but outside the Travelcard's Zones. The EP is cancelled by the Exit Validation.</p> <p>If the validation following the Entry Validation is inside the Travelcard's Zones, the EP is not used and remains present.</p> <p>If a second validation within the Maximum Journey Time does not occur, the result is an Incomplete Journey. The Mixed Travel Entry Charge is allocated to the Operators. The EP remains present.</p>
	No	Initial validation cancels the EP and commences a Rail Journey (with a Mixed Travel Entry Charge applied).
Initial Validation is Exit at a Gateline	Yes	Completion of valid Rail Journey within the Travelcard's Zones is assumed. The EP is unused and remains present.
	No	Initial validation results in an Exit Only Journey. A Mixed Travel Exit Charge is applied. The EP is cancelled. The Mixed Travel Exit Charge is allocated to the Operators.

SCHEDULE 3

Operation of PAYG

It is acknowledged and agreed by the Parties that:-

- 1) The mechanism for changing any aspect of Parts 1 and 2 of this Schedule 3 is as set out in the table below.
- 2) Subject to paragraph 3) below:-
 - i) their intention is that the data in the tables in Part 2 of this Schedule 3 which are fully populated at the time of signature will be that data which is applied in the system from the PAYG Launch Date; and
 - ii) all tables in Part 2 of this Schedule 3 which are not fully populated at the date of this Agreement shall be populated prior to the Anticipated PAYG Launch Date consistent with the applicable process in the column headed "Process for making changes" in the table below, and subject to the notice periods in the table headed "Notice Period for amendments" in the third table below.
- 3) Future changes are to be agreed or determined in accordance with the applicable process in the column headed "Process for making changes" on or before the commencement of the relevant Notice Period for amendments shown in the table below. Changes to Part 1 and Part 2, Tables 1, 2, 3, 6-13, will only be applied at Fares Revision Dates as detailed in Schedule 2 Part 2q; changes to other items can be applied at any time, subject to the appropriate "Notice Period for amendments".
- 4) If there are manifest errors in the implementation in the PAYG System of the values provided for in this Schedule 3, TTL shall rectify within 14 days following TTL becoming aware of the errors as a result of notification by the Operators or otherwise.
- 5) TTL shall be responsible for issuing revised versions of Parts 1 and 2 of this Schedule 3 subject to the procedures agreed between the Parties in this Schedule and any further procedures which the Parties shall (acting reasonably) agree for this purpose.

Item	Title and headings	Process for making changes
Map 1	The PAYG Zonal Area for Rail Journeys	MAP: Map 1 will be amended by agreement between the Parties and (unless otherwise agreed by the Parties) will be amended to reflect any changes to the equivalent map included in the Travelcard Agreement.
Notes to Map 1		For the avoidance of doubt, nothing in this Table shall of itself constrain the ability of a Party to make a change to its network and Schedule 2 Part 2d shall apply in any circumstances where there is such a change to a Party's

		network. NOTES: to be agreed between the Parties pursuant to Schedule 2 Part 2d.
Map 2 Notes to Map 2	Categorisation of PAYG Fares for Specific Rail Journeys	MAP and NOTES: to be agreed between the Parties pursuant to Schedule 2 Part 2d.

Item	Title and headings	Process for making changes
Tables 1-3:	Category 1-3 PAYG Fares	Table 1: Operators to determine. Table 2: TTL to determine. Table 3: The Parties must agree; otherwise Schedule 2 Part 2c applies. Note: PAYG Fares Revision Dates to observe National Rail timings as per Schedule 2 Part 2q
Table 4	TfL-NR Interchange Times	The Parties to agree to any proposed change using reasonable endeavours. Otherwise the dispute resolution process set out in Clause 22 shall apply.
Table 5	Stations with Routeing Validators located inside the paid area for routeing purposes	The Parties to agree to any proposed change using reasonable endeavours. Otherwise the dispute resolution process set out in Clause 22 shall apply.
Table 6	Day Caps	The Parties to agree subject to Schedule 2 Part 2h (first 1)
Table 7	Peak Time restrictions	The Parties to agree to any proposed change using reasonable endeavours. Otherwise the dispute resolution process as set out in Clause 22 shall apply.
Table 8	Discount and discount card values for Rail Journeys:	
	Changes to the structure/types of discount.	The Parties to agree to any proposed change using reasonable endeavours. Otherwise the dispute resolution process as set out in Clause 22 shall apply.

	Changes to Category 1-3 PAYG Fares	As for Tables 1-3
	Changes to Entry Charges and Exit Charges	Pursuant to Schedule 2 Part 2m
	Changes to Caps	Pursuant to Schedule 2 Part 2h
Table 9	Entry Charges, Exit Charges and related items	Pursuant to Schedule 2 Part 2m
Table 10	Miscellaneous Parameters	The Parties to agree to any proposed change using reasonable endeavours. Otherwise the dispute resolution process as set out in Clause 22 shall apply.
Tables 11a and 11b	Locations designated as OSIs and linked Maximum Interchange Times	The Parties to agree to any proposed change using reasonable endeavours. Otherwise the dispute resolution process as set out in Clause 22 shall apply.
Table 12	Stations designated as Continuation Exits	The Parties to agree to any proposed change using reasonable endeavours. Otherwise the dispute resolution process as set out in Clause 22 shall apply.
Table 13	Permitted Maximum Journey Times	The Parties to agree to any proposed change using reasonable endeavours. Otherwise the dispute resolution process as set out in Clause 22 shall apply.
Table 14	Incomplete Journey Allocations by station	Pursuant to Schedule 7, Part 2 paragraph 1.9 or as subsequently modified by agreement between the Parties.
Table 15	Station Ownership	The Parties to agree to any proposed change using reasonable endeavours (provided that nothing in this table shall in itself constrain any Party's ability to make changes to station ownership).

<u>Notice Periods for amendments to Schedule 3 Part 1 and Tables 1-3 and 6-13 of Schedule 3 Part 2</u>
Notification dates for TTL's Ticketing Services Provider are as follows (days prior to the implementation of a fares revision):
136 days – general overview of the revision including declaration of intention to make a fares revision and intention to make any change to the structure of Zones or to OSI locations;
98 days – notification of any structural changes to PAYG fares;
70 days – initial notification of all new fare values;

42 days – new fare values confirmed to the Ticketing Services Provider by TTL.

Changes proposed by the Operators should be notified to TTL at least 10 working days prior to the TTL Service Provider notification dates above.

Part 1 - PAYG Acceptance

Subject to the provisions of Clause 3, the Parties will accept PAYG as a means of payment for all Rail Journeys within Zones 1 to 9 on the attached Map 1 and in addition for:

(1) Rail Journeys between the nine Zones and

- Watford Junction; and
- The four stations of Chafford Hundred, Ockendon, Purfleet and Grays

(2) All journeys on Croydon Tramlink and on all bus services comprising the TTL London Bus Network.

For the avoidance of doubt, PAYG is not valid on the Southeastern Highspeed service between Stratford and St Pancras

Map 2 below shows which Party will be responsible for setting the PAYG fares for specific Rail Journeys within the nine Zones and the extensions under (1) above.

Map 1: The PAYG Zonal Area for Rail Journeys

Please see the attached Map

NOTES TO MAP 1

1. PAYG is not valid for travel on Heathrow Express.
2. On Heathrow Connect, PAYG Zonal fares apply between Paddington and Hayes and Harlington.
3. Outside the Zones shown, PAYG is valid to Watford Junction (Zone W in Tables 1-3 of Part 2 of this schedule) and to Grays via Rainham (Essex) and Uppingham.

Map 2: Categorisation of PAYG fares for Specific Rail Journeys

Please see the attached Map

Notes to Map 2

1. Outside the zonal area, all Category 2 fares from Purfleet, Grays, Chafford Hundred and Ockenden and Category 2 fares from Watford Junction to Zone 1 (including Euston) are set by the local lead Operator for the London Terminal flow.
2. Within the zonal area, the Operators control fares over the following sections of line but have opted to charge Category 2 fares instead of Category 1 fares provided the category 2 fare does not exceed the Category 1 fare:
 - (a) between Liverpool Street and the Victoria Line stations of Seven Sisters; Tottenham Hale; and Walthamstow Central
 - (b) between Barking and Rainham
 - (c) between Paddington, West Drayton and Greenford
 - (d) between Marylebone and Paddington and South Ruislip
 - (e) between Stratford and Tottenham Hale.

Part 2 - PAYG Operating Parameters

Table 1	-	Category 1 PAYG fares (Schedule 2 Part 2a)
Table 2	-	Category 2 PAYG fares (Schedule 2 Part 2a)
Table 3	-	Category 3 PAYG fares (Schedule 2 Part 2a)
Table 4	-	TfL-NR Interchange Times (Schedule 7)
Table 5	-	Stations with Routeing Validators (Schedule 2 Parts 2e-2g)
Table 6	-	One day caps and prices (Schedule 2 Part 2h(1))
Table 7	-	Time bands for peak fares (Schedule 2 Part 2i)
Table 8	-	Discount Fares and Parameters (Schedule 2 Part 2l)
Table 9	-	Entry Charges, Exit Charges and related items (Schedule 2 Part 2m)
Table 10	-	Miscellaneous Parameters
Table 11	-	Stations designated as OSIs and linked interchange times (Schedule 2 Part 2n)
Table 12	-	Stations designated as Continuation Exits (Schedule 2 Part 2o)
Table 13	-	Permitted Maximum Journey Times (Schedule 2 Part 2p)
Table 14	-	Incomplete Journey Revenue Allocations (Schedule 7)
Table 15	-	Station Ownership

Fares shown are those as at the date of the Agreement

Table 1: Category 1 PAYG Fares (see Schedule 2, Part 2a)

Table 1.1 Adult peak fares for Rail Journeys (pence)

1	190					
2	210	140				
3	260	180	140			
4	310	220	180	140		
5	390	270	220	180	140	
6	490	320	270	220	180	140
7	490	320	270			
8	600	400	350			
9	600	400	350			
W	650	400	350			
G	460	410	380	330	220	220
	1	2	3	4	5	6

Table 1.2 Adult offpeak fares for Rail Journeys (pence)

1	150					
2	170	130				
3	200	150	130			
4	230	170	150	130		
5	260	200	170	150	130	
6	320	220	200	170	150	130
7	320	230	200			
8	320	230	200			
9	320	230	200			
W	400	230	200			
G	390	330	320	250	190	190
	1	2	3	4	5	6

Table 1.3 Child peak fares for Rail Journeys (pence)

1	95					
2	105	70				
3	130	90	70			
4	155	110	90	70		
5	195	135	110	90	70	
6	245	160	135	110	90	70
7	245	160	135			
8	245	160	135			
9	245	160	135			
W	245	160	135			
G	230	205	190	165	110	110
	1	2	3	4	5	6

Table 1.4 Child offpeak fares for Rail Journeys (pence)

1	75					
2	85	65				
3	100	75	65			
4	100	85	75	65		
5	100	100	85	75	65	
6	100	100	100	85	75	65
7	100	100	100			
8	100	100	100			
9	100	100	100			
W	200	100	100			
G	195	165	160	125	95	95
	1	2	3	4	5	6

Fares shown are those as at the date of the Agreement

Table 2: Category 2 PAYG Fares (See Schedule 2, Part 2a)

Table 2.1 Adult peak fares for Rail Journeys (pence)

1	160									
2	220	110								
3	270	110	110							
4	280	200	110	110						
5	370	200	200	110	110					
6	380	200	200	200	110	110				
7	470	300	250	200	200	110	110			
8	600	400	350	300	250	200	110	110		
9	600	400	350	300	250	200	150	110		
W	700	400	350	300	250	200	150	110	700	
G	620	410	380	330	220	220				170
	1	2	3	4	5	6	7	8	G	

Table 2.2 Adult offpeak fares for Rail Journeys (pence)

1	160									
2	160	110								
3	220	110	110							
4	220	110	110	110						
5	220	110	110	110	110					
6	220	110	110	110	110	110				
7	300	200	110	110	110	110	110			110
8	300	200	110	110	110	110	110	110		110
9	300	200	110	110	110	110	110	110		110
W	450	200	110	110	110	110	110	110	110	550
G	550	330	320	250	190	190				160
	1	2	3	4	5	6	7	8	G	

Table 2.3 Child peak fares for Rail Journeys (pence)

1	55									
2	55	55								
3	55	55	55							
4	55	55	55	55						
5	55	55	55	55	55					
6	55	55	55	55	55	55				
7	100	55	55	55	55	55	55			
8	150	100	55	55	55	55	55	55		
9	150	100	55	55	55	55	55	55		
W	200	100	55	55	55	55	55	55	230	
G	230	205	190	165	110	110				85
	1	2	3	4	5	6	7	8	G	

Table 2.4 Child offpeak fares for Rail Journeys (pence)

1	55									
2	55	55								
3	55	55	55							
4	55	55	55	55						
5	55	55	55	55	55					
6	55	55	55	55	55	55				
7	100	55	55	55	55	55	55			55
8	100	100	55	55	55	55	55	55		55
9	100	100	55	55	55	55	55	55		55
W	200	100	55	55	55	55	55	55	200	
G	195	165	160	125	95	95				80
	1	2	3	4	5	6	7	8	G	

Table 2.5 Bus and Tram fares

For any TTL bus or Tram journey: adult 100p

Fares shown are those as at the date of the Agreement

Table 3: Category 3 PAYG Fares (See Schedule 2, Part 2a)

Table 3.1 Adult peak fares for Rail Journeys (pence)

1	300							
2	320	140						
3	370	180	140					
4	420	220	180	140				
5	500	270	220	180	140			
6	600	320	270	220	180	140		
7	600	320	270					
8	600	400	350					
9	600	400	350					
W	700	400	350					700
G	620	410	380	330	220	220		170
	1	2	3	4	5	6		G

Table 3.2 Adult offpeak fares for Rail Journeys (pence)

1	260							
2	280	130						
3	310	150	130					
4	340	170	150	130				
5	370	200	170	150	130			
6	430	220	200	170	150	130		
7	450	230	200					
8	450	230	200					
9	450	230	200					
W	450	230	200					550
G	550	330	320	250	190	190		160
	1	2	3	4	5	6		G

Table 3.3 Child peak fares for Rail Journeys (pence)

1	95							
2	105	70						
3	130	90	70					
4	155	110	90	70				
5	195	135	110	90	70			
6	245	160	135	110	90	70		
7	245	160	135					
8	245	160	135					
9	245	160	135					
W	245	160	135					245
G	230	205	190	165	110	110		85
	1	2	3	4	5	6		G

Table 3.4 Child offpeak fares for Rail Journeys (pence)

1	75							
2	85	65						
3	100	75	65					
4	100	85	75	65				
5	100	100	75	75	65			
6	100	100	100	85	75	65		
7	100	100	100					
8	100	100	100					
9	100	100	100					
W	200	100	100					200
G	195	165	160	125	95	95		80
	1	2	3	4	5	6		G

Fares shown are those as at the date of the Agreement

Table 4: TfL-NR Interchange Times

NLC	NR Interchange Station	NLC	TfL Interchange Station	Time in Minutes
5399	Balham	512	Balham	3
7492	Barking	514	Barking	2
5112	Blackfriars	521	Blackfriars	3
5112	Blackfriars	639	Mansion House	12
5112	Blackfriars	724	Temple	12
7400	Blackhorse Road	522	Blackhorse Road	3
6027	Bowes Park	527	Bounds Green	5
5081	Brixton	778	Brixton	3
1437	Brondesbury	622	Kilburn	9
1440	Camden Road LO	535	Camden Town	5
5142	Cannon Street	536	Cannon Street	3
5142	Cannon Street	513	Bank	6
539	Chalfont and Latimer	539	Chalfont and Latimer	1.5
5143	Charing Cross	732	Charing Cross	4
5143	Charing Cross	542	Embankment	5
5301	Clapham High Street	548	Clapham North	4
3190	Ealing Broadway	560	Ealing Broadway	2
5246	Elephant & Castle	570	Elephant & Castle	3
1444	Euston	574	Euston	4
1444	Euston	575	Euston Square	8
577	Farringdon	577	Farringdon	2
7490	Fenchurch Street	502	Aldgate	6
7490	Fenchurch Street	864	Tower Gateway	5
7490	Fenchurch Street	731	Tower Hill	5
7490	Fenchurch Street	644	Monument	8
7490	Fenchurch Street	513	Bank	8
1445	Finchley Road & Frognal LO	579	Finchley Road	5
6119	Finsbury Park	580	Finsbury Park	3
3136	Greenford	589	Greenford	1.5
5146	Greenwich	928	Greenwich DLR	2
5588	Gunnersbury LO	591	Gunnersbury	1
1397	Harrow & Wealdstone	597	Harrow & Wealdstone	2
598	Harrow-on-the-Hill	598	Harrow-on-the-Hill	1.5
6009	Highbury & Islington	603	Highbury & Islington	2
3092	Kensington (Olympia)	618	Kensington (Olympia)	2
1553	Kentish Town	619	Kentish Town	3
1449	Kentish Town West LO	619	Kentish Town	8
1399	Kenton LO	660	Northwick Park	5
6121	King's Cross	625/772	King's Cross	4
5051	Lewisham	940	Lewisham DLR	3
7403	Leytonstone High Road LO	633	Leytonstone	3
7491	Limehouse	862	Limehouse DLR	3
6965	Liverpool Street	513	Bank	8
6965	Liverpool Street	634	Liverpool Street	4
5148	London Bridge	635	London Bridge	4
1475	Marylebone	511	Baker Street	8
1475	Marylebone	569	Edgware Road	8
1475	Marylebone	641	Marylebone	3

6005	Moorgate	645	Moorgate	2
1478	Northolt Park	657	Northolt	3
6003	Old Street	665	Old Street	2
3087	Paddington	670	Paddington B'loo / Circ / Dist	3
3087	Paddington	629	Lancaster Gate	9
1419	Queen's Park LO	680	Queen's Park	1
5570	Richmond	686	Richmond	2
6931	Seven Sisters	698	Seven Sisters	3
9587	Shepherds Bush LO	700	Shepherds Bush (Central)	4
3057	South Ruislip	710	South Ruislip	1.5
7404	South Tottenham LO	698	Seven Sisters	5
1555	St Pancras International	625/772	King's Cross	6
6969	Stratford	719	Stratford	2.5
1484	Sudbury Hill Harrow	720	Sudbury Hill	5
6951	Tottenham Hale	729	Tottenham Hale	2
7464	Upminster	736	Upminster	2
1524	Upper Holloway LO	508	Archway	6
5597	Vauxhall	777	Vauxhall	3
5426 /				
8558	Victoria	741	Victoria	4
6953	Walthamstow Central	742	Walthamstow Central	2
7407	Walthamstow Queens Road	742	Walthamstow Central	5
5598 /				
8909	Waterloo	747/796	Waterloo	4
5598 /				
8909	Waterloo	542	Embankment	9
5158	Waterloo East	784	Southwark	5
5158	Waterloo East	747/796	Waterloo	5
5158	Waterloo East	542	Embankment	9
1423	Wembley Central	751	Wembley Central	2
8875	West Brompton LO	755	West Brompton	2
7474	West Ham	757	West Ham	2
1421	West Hampstead LO	758	West Hampstead	4
1525	West Hampstead Thameslink	758	West Hampstead	6
1457	Willesden Junction	766	Willesden Junction	2
5578	Wimbledon	767	Wimbledon	2
5152	Woolwich Arsenal	573	Woolwich Arsenal	2

Fares shown are those as at the date of the Agreement

Table 5: Routing Validators: locations and numbers

Station	Location	Quantity already on site	Quantity New	Journeys catered for	Fares Node ¹	App. Node ²	Comment
Blackhorse Road	Footbridge	2	NIL	Interchanges between LO and LU	Y	Y	
Canada Water	LO Platforms	NIL	4	Interchanges between LO and LU	Y	Y	Not operational until ELL reopens
Gospel Oak	GOB Platform	NIL	2	Interchanges to/from GOB	Y	Y	
Gunnersbury	Island Platform	2	NIL	Interchanges between LO and LU	Y	Y	
Highbury and Islington	LO Platforms	NIL	4	Interchanges between LO and LU/FCC	Y	Y	
Rayners Lane	Uxbridge-bound platform adjacent to staircase	NIL	2	"Dog-leg" interchanges between Metropolitan and Piccadilly lines	Y	N	Precise location under discussion
West Brompton	LU Platforms (2) LU High level (2)	4	NIL	Interchanges between LO/Southern and LU	Y	Y	
Whitechapel	LO Platforms	NIL	4	Interchanges between LO and LU	Y	Y	Not operational until ELL reopens
Willesden Junction	LO High level platforms	NIL	2	Interchanges within LO and between LO and LU	Y	Y	
Stratford - LO	LO Platforms	NIL	4	Interchanges to/from LO	Y	Y	
Richmond	Head of LU/LO platforms and on platform 3	3	2	Interchanges between SWT and LO/LU	Y	Y	
Wimbledon	LU Platforms	4	NIL	Interchanges between NR and LU	Y	Y	
Kensington Olympia	LU Island Platform	2	1	Interchanges between LO/Southern and LU	Y	Y	
	Total	17	25				

¹ Y means Yes the OSI is a Fares Node, N means it is not.

² Y means Yes the OSI is an Apportionment Node, N means it is not.

Fares shown are those as at the date of the Agreement

Table 6: One Day Caps (pence)

6a: Adult Peak Day Caps

1	720					
2	720	720				
3	860	860	860			
4	1000	900	900	900		
5	1260	900	900	900	900	
6	1480	900	900	900	900	900
7	1620	1060	1060	1060	1060	1060
8	1620	1060	1060	1060	1060	1060
9	1620	1060	1060	1060	1060	1060
W	1800	1260	1260	1260	1260	1260
G	1800	1260	1260	1260	1260	1260
	1	2	3	4	5	6

6b: Adult Off-Peak Day Caps

1	560					
2	560	510				
3	630	510	510			
4	630	510	510	510		
5	750	510	510	510	510	
6	750	510	510	510	510	510
7	900	560	560	560	560	560
8	900	560	560	560	560	560
9	900	560	560	560	560	560
W	1350	760	760	760	760	760
G	1350	760	760	760	760	760
	1	2	3	4	5	6

6c: Child Peak Day Caps

1	360					
2	360	360				
3	430	430	430			
4	500	450	450	450		
5	630	450	450	450	450	
6	740	450	450	450	450	450
7	810	530	530	530	530	530
8	810	530	530	530	530	530
9	810	530	530	530	530	530
W	900	630	630	630	630	630
G	900	630	630	630	630	630
	1	2	3	4	5	6

6d: Child Off-Peak Day Caps

1	100					
2	100	100				
3	100	100	100			
4	100	100	100	100		
5	100	100	100	100	100	
6	100	100	100	100	100	100
7	100	100	100	100	100	100
8	100	100	100	100	100	100
9	100	100	100	100	100	100
W	670	200	200	200	200	200
G	670	200	200	200	200	200
	1	2	3	4	5	6

Table 6e

Adult Bus and Tram Cap: 330

Fares shown are those as at the date of the Agreement

Table 7: Peak Fare Conditions

	Peak hours (Time of Initial Entry Validation)
M-F†	06.35 to 9.26; 16.05 to 18.56
Sat	None
Sun	None
Bank Holidays	None
† Public facing material will refer to the peak hours as 06.30 to 09.30 and 16.00 to 19.00	
<p>Other Conditions*</p> <p>1. All stations from Watford Junction to Euston NR inclusive: peak fares apply only during the AM peak M-F towards London and PM peak M-F away from London. See Schedule 2 Part 2(i).</p> <p>2. Category 2 fares apply on the Watford Junction - Euston line. In certain cases special fares apply to/from Euston: (i) adult peak - Zone 5 £3.20, Zone 6 £3.50, Zone 7 £4.00, Zone 8 £5.00, Zone W £6.50; (ii) adult Off -peak – Zone W £4.00 Standard Category 2 child fares apply in all cases.</p> <p>3. At the following stations travel from the time indicated Mon-Fri will be included within the off-peak day caps shown in Table 6 rather than the peak day caps: Chesham 09:00, Amersham 09.10, Chalfont & Latimer 09.15, Chorleywood 09.15, Rickmansworth 09.20.</p>	

* Directionality conditions only apply when travel involves more than one zone.

Fares shown are those as at the date of the Agreement

Table 8: Discount and Discount Card Parameters for Rail Journeys

	Child Under 11	Child 11-15	16/17	New Deal	Railcard ³	Priv Adult ⁴	Priv Child ⁵
Category 1 fare	Per Table 1.3 & 1.4	Per Table 1.3 & 1.4	adult	½ adult	66% adult (off peak only)	¼ adult	¼ Child 11-15
Category 2 fare	Free	Per Table 2.3 & 2.4	½ adult	½ adult	adult ⁶	¼ adult	¼ Child 11-15
Category 3 fare	Per Table 3.3 & 3.4	Per Table 3.3 & 3.4	adult	½ adult	66% adult (off peak only)	¼ adult	¼ Child 11-15
Entry/Exit Charges							
- TTL Station	Nil	100p	adult	½ adult	adult	¼ adult	¼ Child 11-15
- Operator Station	Peak: ½ adult Offpeak: 100p	Peak: ½ adult Offpeak: 100p	adult	½ adult	adult	¼ adult	¼ Child 11-15
Cap (refer to Table 6 for Adult and Child caps)	child	child	adult	½ adult	66% adult (off peak only)	adult	child
Bus and Tram fares & Bus and Tram only cap	Free	Free	Free or ½ adult	½ adult bus & tram fare & cap	adult	adult	adult

³ Railcard types applicable: 16-25, Senior, Disabled and HM Forces.

⁴ PAYG Privilege travel rights on TTL and Operator services subject to status (safeguarded staff; new entrants etc).

⁵ PAYG Privilege travel rights on TTL and Operator services subject to status (safeguarded staff, new entrants etc).

⁶ 66% adult (off peak only) applies for journeys over those sections of line coloured orange on Map 2 where the journey can be made in whole or in part on the services of an Operator and/or the London Overground Operator.

Fares shown are those as at the date of the Agreement

Table 9: Entry Charges, Exit Charges and related items – Adult rates

General rules for classes of station	Entry / Exit charges PAYG Only		Entry / Exit charges Mixed Travel	
	Peak	Offpeak	Peak	Offpeak
General Rules				
Operator controlled: gates give access only to Operator services	£6.00	£4.30	£4.20	£3.40
Operator controlled: gates give access to Operator and TTL services	£6.00	£4.30	£4.20	£3.40
TTL controlled: gates give access only to TTL services	£6.00	£4.30	£4.20	£3.40
TTL controlled, gates give access to Operator and TTL services	£6.00	£4.30	£4.20	£3.40
Station specific rules At the stations below the following will apply (reflecting fares to Euston) pending installation of remaining validators at Euston NR:				
Watford Junction	£6.50	£4.00		
Watford High St; Bushey	£5.00	£3.00		
Carpenders Park	£4.00	£3.00		
Hatch End	£3.50	£2.20		
Headstone Lane; Harrow and Wealdstone	£3.20	£2.20		

Other:

1. Extension Permit Minimum Amount (Global Parameter): £1.50

Fares shown are those as at the date of the Agreement

Table 10: Miscellaneous Parameters⁷

Parameter	Value	Level Parameter Applied at
Permitted timebands	5	Global
Permitted fare levels	2	Global
Start of Day	04:30 hours	Global
Second touch on a Passenger Validator at the same station within specified time period (the “ <i>Continuation Entry</i> ” time) will be ignored; if longer an Incomplete Journey occurs and a second journey starts	2 minutes	Station
Second touch on an entry gate reader at the same station within specified time period (the “ <i>Pass Back</i> ” time) will be rejected; if longer an Incomplete Journey occurs and a second journey starts	30 minutes	Station
Same Station Exit Time	2 minutes	Station
Same Station Time	30 minutes	Station
Same Station Re-entry Time	45 minutes	Station
Different Station Re-entry Time	45 minutes	Station
Emergency OSI Time	30 minutes	Global
<p>The following arrangements will apply at stations served by Tramlink (Wimbledon, Elmers End):</p> <ol style="list-style-type: none"> 1. Entry Threshold shall be zero. 2. Validators provided for Tramlink shall perform the following additional actions prior to writing a Tramlink validation to the item of TTL Smartmedia: <ol style="list-style-type: none"> (i) If the last transaction is an Entry Validation at the same station within the Same Station Exit Time, void that validation and its associated Entry Charge; (ii) If the last transaction is an Entry Validation at a different station within the Maximum Journey Time then write an Exit Validation. 3. Gates will allow Exit at a zero Exit Charge if the last transaction was a Tramlink validation within 70 minutes. 		

⁷ For parameters that are applied at “Station” level, any exceptions to the default value shown should also be included in this table.

Fares shown are those as at the date of the Agreement

Table 11a: Locations designated as OSIs and linked Maximum Interchange Times⁸

NLC ⁹	Exit station	type	NLC ⁹	Entry station	type	Time ¹⁰	Fares Node ¹¹	Apportionment Node ¹²
502	Aldgate	LU	7490	Fenchurch Street	NR	40	Y	Y
508	Archway	LU	1524	Upper Holloway	NR	20	Y	Y
511	Baker Street	LU	1475	Marylebone	NR	40	Y	Y
512	Balham	LU	5399	Balham	NR	20	Y	Y
5399	Balham	NR	512	Balham	LU	20	Y	Y
513	Bank Central/Northern/DLR	LU	513	Bank Waterloo & City	LU	15	Y	N
513	Bank Waterloo & City	LU	513	Bank Central/Northern/DLR	LU	15	Y	N
513	Bank	LU	536	Cannon Street	LU	15	Y	N
513	Bank	LU	5142	Cannon Street	NR	40	Y	Y
513	Bank	LU	7490	Fenchurch Street	NR	40	Y	Y
513	Bank	LU	6965	Liverpool Street	NR	40	Y	Y
513	Bank	LU	639	Mansion House	LU	15	Y	N
5112	Blackfriars	NR	639	Mansion House	LU	20	Y	Y
5112	Blackfriars	NR	724	Temple	LU	20	Y	Y
527	Bounds Green	LU	6027	Bowes Park	NR	20	Y	Y
851	Bow Church	DLR	528	Bow Road	LU	15	N	N
528	Bow Road	LU	851	Bow Church	DLR	15	N	N
6027	Bowes Park	NR	527	Bounds Green	LU	20	Y	Y
778	Brixton	LU	5081	Brixton	NR	20	Y	Y
5081	Brixton	NR	778	Brixton	LU	20	Y	Y
5096	Bromley North	NR	5064	Bromley South	NR	30	N	Y
5064	Bromley South	NR	5096	Bromley North	NR	30	N	Y
1437	Bromdesbury	NR	622	Kilburn	LU	20	Y	Y
1440	Camden Road	NR	535	Camden Town	LU	20	Y	Y
535	Camden Town	LU	1440	Camden Road	NR	20	Y	Y
842	Canary Wharf	DLR	852	Canary Wharf	LU	20	N	N
852	Canary Wharf	LU	842	Canary Wharf	DLR	20	N	N
842	Canary Wharf	DLR	666	Canary Wharf E2	LU	20	N	N
852	Canary Wharf	LU	666	Canary Wharf E2	LU	10	N	N
852	Canary Wharf	LU	855	Heron Quays	DLR	15	N	N
666	Canary Wharf E2	LU	842	Canary Wharf	DLR	20	N	N
666	Canary Wharf E2	LU	852	Canary Wharf	LU	10	N	N
666	Canary Wharf E2	LU	855	Heron Quays	DLR	15	N	N
536	Cannon Street	LU	513	Bank	LU	15	Y	N
5142	Cannon Street	NR	513	Bank	LU	15	Y	Y
5142	Cannon Street	NR	536	Cannon Street	LU	20	Y	Y
536	Cannon Street	LU	5142	Cannon Street	NR	40	Y	Y

⁸ Excludes OSIs associated with ELL re-opening.

⁹ Where the station has a common LU & NR station computer (Kenton, Kentish Town, Seven Sisters and Wembley Central), the LU NLC is used.

¹⁰ Time in minutes.

¹¹ Y means Yes the Entry station of the OSI is a Fares Node, N means it is not (note there cannot be more than 127 Fares Nodes).

¹² Y means Yes the OSI is an Apportionment Node, N means it is not.

5077	Catford	NR	5047	Catford Bridge	NR	20	Y	Y
5047	Catford Bridge	NR	5077	Catford	NR	20	Y	Y
732	Charing Cross	LU	5143	Charing Cross	NR	40	Y	Y
5143	Charing Cross	NR	732	Charing Cross	LU	20	Y	Y
5143	Charing Cross	NR	542	Embankment	LU	20	Y	Y
5301	Clapham High Street	NR	548	Clapham North	LU	20	Y	Y
548	Clapham North	LU	5301	Clapham High Street	NR	20	Y	Y
5048	Clock House	NR	5080	Kent House	NR	20	Y	Y
569	Edgware Road H&C	LU	1475	Marylebone	NR	40	Y	Y
570	Elephant & Castle	LU	5246	Elephant & Castle	NR	20	Y	Y
5246	Elephant & Castle	NR	570	Elephant & Castle	LU	20	Y	Y
542	Embankment	LU	5143	Charing Cross	NR	40	Y	Y
542	Embankment	LU	5598/ 8909	Waterloo	NR	40	Y	Y
542	Embankment	LU	5158	Waterloo East	NR	40	Y	Y
1444	Euston	NR	574	Euston	LU	20	Y	Y
1444	Euston	NR	575	Euston Square	LU	20	Y	Y
1444	Euston	NR	6121	King's Cross	NR	40	Y	Y
1444	Euston	NR	1555	St Pancras International	NR	30	Y	Y
574	Euston	LU	1444	Euston	NR	40	Y	Y
574	Euston	LU	575	Euston Square	LU	20	Y	N
575	Euston Square	LU	1444	Euston	NR	40	Y	Y
575	Euston Square	LU	574	Euston	LU	20	Y	N
7490	Fenchurch Street	NR	502	Aldgate	LU	20	Y	Y
7490	Fenchurch Street	NR	513	Bank	LU	20	Y	Y
7490	Fenchurch Street	NR	6965	Liverpool Street	NR	40	Y	Y
7490	Fenchurch Street	NR	644	Monument	LU	20	Y	Y
7490	Fenchurch Street	NR	864	Tower Gateway	DLR	20	Y	Y
7490	Fenchurch Street	NR	731	Tower Hill	LU	20	Y	Y
579	Finchley Road	LU	1445	Finchley Road & Frognal	NR	20	Y	Y
1445	Finchley Road & Frognal	NR	579	Finchley Road	LU	20	Y	Y
6876	Forest Gate	NR	7408	Wanstead Park	NR	20	Y	Y
6977	Hackney Central	NR	6867	Hackney Downs	NR	20	Y	Y
6867	Hackney Downs	NR	6977	Hackney Central	NR	20	Y	Y
593	Hammersmith D&P	LU	773	Hammersmith H&C	LU	20	Y	N
773	Hammersmith H&C	LU	593	Hammersmith D&P	LU	20	Y	N
595	Hanger Lane	LU	671	Park Royal	LU	25	N	N
6012	Harringay	NR	7401	Harringay Green Lanes	NR	20	Y	Y
7401	Harringay Green Lanes	NR	6012	Harringay	NR	20	Y	Y
855	Heron Quays	DLR	852	Canary Wharf	LU	15	N	N
855	Heron Quays	DLR	666	Canary Wharf E2	LU	15	N	N
5080	Kent House	NR	5048	Clock House	NR	20	Y	Y
619	Kentish Town	LU/NR	1449	Kentish Town West	NR	20	Y	Y
1449	Kentish Town West	NR	619	Kentish Town	LU/NR	20	Y	Y
620	Kenton	LU / NR	660	Northwick Park	LU	20	Y	Y
622	Kilburn	LU	1437	Brondesbury	NR	20	Y	Y
6121	King's Cross	NR	1444	Euston	NR	40	Y	Y
6121	King's Cross	NR	772	King's Cross St. Pancras Met	LU	20	Y	Y
6121	King's Cross	NR	625	King's Cross St. Pancras Tube	LU	20	Y	Y
6121	King's Cross	NR	1555	St Pancras International	NR	20	Y	Y

772	King's Cross St. Pancras Met	LU	6121	King's Cross	NR	40	Y	Y
772	King's Cross St. Pancras Met	LU	625	King's Cross St. Pancras Tube	LU	15	Y	N
772	King's Cross St. Pancras Met	LU	1555	St Pancras International	NR	20	Y	Y
625	King's Cross St. Pancras Tube	LU	6121	King's Cross	NR	40	Y	Y
625	King's Cross St. Pancras Tube	LU	772	King's Cross St. Pancras Met	LU	15	Y	N
625	King's Cross St. Pancras Tube	LU	1555	St Pancras International	NR	20	Y	Y
629	Lancaster Gate	LU	3087	Paddington	NR	40	Y	Y
940	Lewisham	DLR	5051	Lewisham	NR	20	N	Y
5051	Lewisham	NR	940	Lewisham	DLR	20	N	Y
633	Leytonstone	LU	7403	Leytonstone High Road	NR	20	Y	Y
7403	Leytonstone High Road	NR	633	Leytonstone	LU	20	Y	Y
862	Limehouse	DLR	7491	Limehouse	NR	20	N	Y
7491	Limehouse	NR	862	Limehouse	DLR	20	N	Y
6965	Liverpool Street	NR	513	Bank	LU	20	Y	Y
6965	Liverpool Street	NR	7490	Fenchurch Street	NR	40	Y	Y
634	Liverpool Street	LU	6965	Liverpool Street	NR	40	Y	Y
6965	Liverpool Street	NR	634	Liverpool Street	LU	20	Y	Y
6965	Liverpool Street 1-10	NR	6965	Liverpool Street 11-18	NR	30	Y	Y
6965	Liverpool Street 11- 18	NR	6965	Liverpool Street 1-10	NR	30	Y	Y
635	London Bridge	LU	5148	London Bridge	NR	40	Y	Y
5148	London Bridge	NR	635	London Bridge	LU	20	Y	Y
5148	London Bridge (SouthEastern)	NR	5148	London Bridge (Southern)	NR	30	Y	Y
5148	London Bridge (Southern)	NR	5148	London Bridge (SouthEastern)	NR	30	Y	Y
639	Mansion House	LU	513	Bank	LU	15	Y	N
639	Mansion House	LU	5112	Blackfriars	NR	20	Y	Y
1475	Marylebone	NR	511	Baker Street	LU	20	Y	Y
1475	Marylebone	NR	569	Edgware Road H&C	LU	20	Y	Y
1475	Marylebone	NR	641	Marylebone	LU	20	Y	Y
1475	Marylebone	NR	3087	Paddington	NR	40	Y	Y
641	Marylebone	LU	1475	Marylebone	NR	40	Y	Y
644	Monument	LU	7490	Fenchurch Street	NR	40	Y	Y
651	New Cross	NR	652	New Cross Gate	NR	25	N	Y
652	New Cross Gate	NR	651	New Cross	NR	25	N	Y
660	Northwick Park	LU	620	Kenton	LU / NR	20	Y	Y
3087	Paddington	NR	629	Lancaster Gate	LU	20	Y	Y
3087	Paddington	NR	1475	Marylebone	NR	40	Y	Y
670	Paddington	LU	3087	Paddington (inc H&C)	NR	40	Y	Y
3087	Paddington (inc H&C)	NR	670	Paddington	LU	20	Y	Y
3087	Paddington (NR Gates)	NR	3087	Paddington (NR Validators)	NR	20	Y	Y
3087	Paddington (NR Validators)	NR	3087	Paddington (NR Gates)	NR	20	Y	Y
671	Park Royal	LU	595	Hanger Lane	LU	25	N	N
5072	Penge East	NR	5378	Penge West	NR	25	Y	Y
5378	Penge West	NR	5072	Penge East	NR	25	Y	Y

698	Seven Sisters	LU / NR	7404	South Tottenham	NR	20	Y	Y
9587	Shepherd's Bush	NR	700	Shepherd's Bush (Central)	LU	20	Y	Y
700	Shepherd's Bush (Central)	LU	9587	Shepherd's Bush	NR	20	Y	Y
7404	South Tottenham	NR	698	Seven Sisters	LU / NR	20	Y	Y
784	Southwark	LU	5158	Waterloo East	NR	40	Y	Y
1555	St Pancras International	NR	1444	Euston	NR	40	Y	Y
1555	St Pancras International	NR	6121	King's Cross	NR	40	Y	Y
1555	St Pancras International	NR	772	King's Cross St. Pancras Met	LU	20	Y	Y
1555	St Pancras International	NR	625	King's Cross St. Pancras Tube	LU	20	Y	Y
720	Sudbury Hill	LU	1484	Sudbury Hill, Harrow	NR	20	Y	Y
1484	Sudbury Hill, Harrow	NR	720	Sudbury Hill	LU	20	Y	Y
724	Temple	LU	5112	Blackfriars	NR	20	Y	Y
729	Tottenham Hale	LU	6951	Tottenham Hale	NR	20	Y	Y
6951	Tottenham Hale	NR	729	Tottenham Hale	LU	20	Y	Y
864	Tower Gateway	DLR	7490	Fenchurch Street	NR	40	Y	Y
864	Tower Gateway	DLR	731	Tower Hill	LU	15	Y	N
731	Tower Hill	LU	7490	Fenchurch Street	NR	40	Y	Y
731	Tower Hill	LU	864	Tower Gateway	DLR	15	Y	N
1524	Upper Holloway	NR	508	Archway	LU	20	Y	Y
5391	Upper Warlingham	NR	5396	Whyteleafe	NR	20	N	Y
777	Vauxhall	LU	5597	Vauxhall	NR	20	Y	Y
5597	Vauxhall	NR	777	Vauxhall	LU	20	Y	Y
741	Victoria	LU	8558	Victoria (SouthEastern)	NR	40	Y	Y
741	Victoria	LU	5426	Victoria (Southern)	NR	40	Y	Y
8558	Victoria (SouthEastern)	NR	741	Victoria	LU	20	Y	Y
8558	Victoria (SouthEastern)	NR	5426	Victoria (Southern)	NR	30	Y	Y
5426	Victoria (Southern)	NR	741	Victoria	LU	20	Y	Y
5426	Victoria (Southern)	NR	8558	Victoria (SouthEastern)	NR	30	Y	Y
742	Walthamstow Central	LU	6953	Walthamstow Central	NR	20	Y	Y
6953	Walthamstow Central	NR	742	Walthamstow Central	LU	20	Y	Y
742	Walthamstow Central	LU	7407	Walthamstow Queens Road	NR	25	Y	Y
6953	Walthamstow Central	NR	7407	Walthamstow Queens Road	NR	25	Y	Y
7407	Walthamstow Queens Road	NR	742	Walthamstow Central	LU	25	Y	Y
7407	Walthamstow Queens Road	NR	6953	Walthamstow Central	NR	25	Y	Y
7408	Wanstead Park	NR	6876	Forest Gate	NR	20	Y	Y
5598/8909	Waterloo	NR	542	Embankment	LU	25	Y	Y
5598/8909	Waterloo	NR	747	Waterloo	LU	20	Y	Y
747	Waterloo	LU	5598/8909	Waterloo	NR	40	Y	Y
5598/8909	Waterloo	NR	5158	Waterloo East	NR	30	Y	Y

747	Waterloo	LU	5158	Waterloo East	NR	40	Y	Y
5598/ 8909	Waterloo	NR	796	Waterloo Jubilee	LU	20	Y	Y
5598/ 8909	Waterloo	NR	747	Waterloo W&C	LU	20	Y	Y
747	Waterloo	LU	747	Waterloo W&C	LU	15	Y	N
5158	Waterloo East	NR	542	Embankment	LU	30	Y	Y
5158	Waterloo East	NR	784	Southwark	LU	20	Y	Y
5158	Waterloo East	NR	5598/ 8909	Waterloo	NR	30	Y	Y
5158	Waterloo East	NR	747	Waterloo	LU	20	Y	Y
5158	Waterloo East	NR	796	Waterloo Jubilee	LU	20	Y	Y
5158	Waterloo East	NR	747	Waterloo W&C	LU	20	Y	Y
796	Waterloo Jubilee	LU	5598/ 8909	Waterloo	NR	40	Y	Y
796	Waterloo Jubilee	LU	5158	Waterloo East	NR	40	Y	Y
796	Waterloo Jubilee	LU	747	Waterloo W&C	LU	15	Y	N
747	Waterloo W&C	LU	5598/ 8909	Waterloo	NR	40	Y	Y
747	Waterloo W&C	LU	747	Waterloo	LU	15	Y	N
747	Waterloo W&C	LU	5158	Waterloo East	NR	40	Y	Y
747	Waterloo W&C	LU	796	Waterloo Jubilee	LU	15	Y	N
751	Wembley Central	LU / LO	751	Wembley Central	NR	20	N	Y
751	Wembley Central	NR	751	Wembley Central	LU / LO	20	N	Y
758	West Hampstead	LU	1421	West Hampstead LO	NR	20	Y	Y
758	West Hampstead	LU	1525	West Hampstead Thameslink	NR	20	Y	Y
1421	West Hampstead LO	NR	758	West Hampstead	LU	20	Y	Y
1421	West Hampstead LO	NR	1525	West Hampstead Thameslink	NR	20	Y	Y
1525	West Hampstead Thameslink	NR	758	West Hampstead	LU	20	Y	Y
1525	West Hampstead Thameslink	NR	1421	West Hampstead LO	NR	20	Y	Y
764	White City	LU	599	Wood Lane	LU	20	Y	N
599	Wood Lane	LU	764	White City	LU	20	Y	N
5396	Whyteleafe	NR	5391	Upper Waringham	NR	20	N	Y

Note: Blackfriars LU is expected to be closed at the Actual Launch date; this results in extra OSIs in the above table for Blackfriars NR to adjacent LU stations and the removal of the Blackfriars LU-NR OSIs, for the duration of the closure.

Fares shown are those as at the date of the Agreement

Table 11b: OSI Locations where the Exit Validation can be missing for fares calculation purposes

Missing Exit Validation allowed at:	When re-entry is at:
Euston NR	Euston LU
Euston NR	Euston Square LU
Limehouse DLR	Limehouse (National Rail Station)
Tottenham Hale (Validators for NX East Anglia users)	Tottenham Hale (LU gateline)
Walthamstow Central (Validators for NX East Anglia users)	Walthamstow Central (LU gateline)
Walthamstow Queens Road	Walthamstow Central (LU gateline)
Wembley Central (Validators for Southern users)	Wembley Central (gateline)

Fares shown are those as at the date of the Agreement

Table 12: Stations designated as Continuation Exits

TTL only	TOC - TTL	TOC only
Canary Wharf DLR Cross harbour London Arena Elverson Road Poplar Westferry	Finsbury Park Kensington Olympia Kentish Town	West Croydon

Fares shown are those as at the date of the Agreement

Table 13: Permitted Maximum Journey Times in minutes¹³

	MF Peak and Interpeak	MF Evening and Saturday	Sunday
For journeys: within Zone 1 or within Zone 2 or within Zones 1 and 2 or within Zones 2 and 3	90	100	110
For all other journeys*: Travel within one zone	70	77	84
Each additional zone travelled through (e.g. a journey from Zone 6 to Zone 6 via Zone 1, would be 10 additional zones)	10	11	12
*Times to be applied are derived from the above and where not already a multiple of 5 are rounded up to the next multiple of 5			

¹³ Any exceptions to the default values shown should also be included in this table.

Fares shown are those as at the date of the Agreement

Table 14: Incomplete journey allocations – from PAYG Launch Date

Station	Percent allocation to TTL (excl London Overground Operator)	Percent allocation to the London Overground Operator	Percent allocation to the Operators (excl London Overground Operator)
Acton Central		100	
Amersham	50		50
Barking			100
Brondesbury		100	
Brondesbury Park		100	
Bushey		50	50
Caledonian Road & Barnsbury		100	
Camden Road		100	
Canonbury		100	
Carpenders Park		100	
Chalfont & Latimer	50		50
Chorleywood	50		50
Crouch Hill		100	
Dalston Kingsland		100	
Ealing Broadway			100
Euston (NR)			100
Farringdon	25		75
Finchley Road & Frognal		100	
Finsbury Park			100
Gospel Oak		100	
Greenford	50		50
Gunnesbury	50	50	
Hackney Central		100	
Hackney Wick		100	
Hampstead Heath		100	
Haringay Green Lanes		100	
Harlesden	50	50	
Harrow & Wealdstone		50	50
Harrow on the Hill	50		50
Hatch End		100	
Headstone Lane		100	
Highbury & Islington	25	25	50
Homerton		100	
Imperial Wharf		50	50
Kensal Green	50	50	
Kensal Rise		100	
Kensington Olympia			100
Kentish Town	50		50

Kentish Town West		100	
Kenton	50	50	
Kilburn High Road		100	
Kew Gardens	50	50	
Leyton Midland Road		100	
Leytonstone High Road		100	
Moorgate	25		75
New Cross			100
New Cross Gate			100
North Wembley	50	50	
Old Street	25		75
Paddington (NR)			100
Queens Park	50	50	
Richmond			100
Rickmansworth	50		50
Seven Sisters - Gates & Validators	50		50
Shepherd's Bush (London Overground)		50	50
South Acton		100	
South Hampstead		100	
South Kenton	50	50	
South Ruislip	50		50
South Tottenham		100	
Stonebridge Park	50	50	
Stratford	50		50
Tottenham Hale - Validators only			100
Tottenham Hale – Gates only	100		
Upminster			100
Upper Holloway		100	
Walthamstow Central - Validators only			100
Walthamstow Central – Gates only	100		
Walthamstow Queens Road		100	
Wanstead Park		100	
Watford High Street		100	
Watford Junction			100
Wembley Central		50	50
West Brompton		50	50
West Ham	50		50
West Hampstead LO		100	
West Ruislip	50		50
Willesden Junction		100	
Wimbledon			100
Woodgrange Park		100	
Any other Operator Station not shown above			100
Any other TTL-controlled Station	100		

not shown above			
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Fares shown are those as at the date of the Agreement

Table 15: List of Operator Stations and London Overground Stations

Table 15.1 Operator Stations

Station	Responsible TOC (PAYG)
Abbey Wood	Southeastern
Acton Main Line	First Great Western
Albany Park	Southeastern
Alexandra Palace	First Capital Connect
Anerley (See Note 2)	Southern
Angel Road	NX East Anglia
Balham (National Rail station)	Southern
Banstead	Southern
Barking	c2c
Barnehurst	Southeastern
Barnes	South West Trains
Barnes Bridge	South West Trains
Battersea Park	Southern
Beckenham Hill	Southeastern
Beckenham Junction	Southeastern
Bellingham	Southeastern
Belmont	Southern
Belvedere	Southeastern
Berrylands	South West Trains
Bethnal Green (National Rail Station)	NX East Anglia
Bexley	Southeastern
Bexleyheath	Southeastern
Bickley	Southeastern
Birkbeck	Southern
Blackfriars (National Rail station)	First Capital Connect
Blackheath	Southeastern
Bowes Park	First Capital Connect
Brentford	South West Trains
Brimmsdown	NX East Anglia
Brixton (National Rail station)	Southeastern
Brockley (See Note 2)	Southern
Bromley North	Southeastern
Bromley South	Southeastern
Bruce Grove	NX East Anglia
Bush Hill Park	NX East Anglia
Cambridge Heath	NX East Anglia
Cannon Street (National Rail station)	Southeastern
Carshalton	Southern
Carshalton Beeches	Southern
Castle Bar Park	First Great Western
Caterham	Southern
Catford	Southeastern

Catford Bridge	Southeastern
Chadwell Heath	NX East Anglia
Chafford Hundred	c2c
Charing Cross (National Rail station)	Southeastern
Charlton	Southeastern
Cheam	Southern
Chelsfield	Southeastern
Chessington North	South West Trains
Chessington South	South West Trains
Chingford	NX East Anglia
Chipstead	Southern
Chislehurst	Southeastern
Chiswick	South West Trains
City Thameslink	First Capital Connect
Clapham High Street	Southern
Clapham Junction	South West Trains
Clapton	NX East Anglia
Clock House	Southeastern
Coulsdon South	Southern
Crayford	Southeastern
Crews Hill	First Capital Connect
Cricklewood	First Capital Connect
Crofton Park	Southeastern
Crystal Palace (See Note 2)	Southern
Dagenham Dock	c2c
Denmark Hill	Southeastern
Deptford	Southeastern
Drayton Green	First Great Western
Drayton Park	First Capital Connect
Ealing Broadway	First Great Western
Earlsfield	South West Trains
East Croydon	Southern
East Dulwich	Southern
Eden Park	Southeastern
Edmonton Green	NX East Anglia
Elephant & Castle (National Rail station)	First Capital Connect
Elmers End	Southeastern
Elmstead Woods	Southeastern
Elstree	First Capital Connect
Eltham	Southeastern
Emerson Park	NX East Anglia
Enfield Chase	First Capital Connect
Enfield Lock	NX East Anglia
Enfield Town	NX East Anglia
Epsom Downs	Southern
Erith	Southeastern
Essex Road	First Capital Connect
Euston (National Rail station)	London Midland
Ewell East	Southern

Ewell West	South West Trains
Falconwood	Southeastern
Feltham	South West Trains
Fenchurch Street	c2c
Finsbury Park (See Note 1)	First Capital Connect
Forest Gate	NX East Anglia
Forest Hill (See Note 2)	Southern
Fulwell	South West Trains
Gidea Park	NX East Anglia
Gipsy Hill	Southern
Goodmayes	NX East Anglia
Gordon Hill	First Capital Connect
Grange Park	First Capital Connect
Grays	c2c
Greenwich (See Note 1)	Southeastern
Grove Park	Southeastern
Hackbridge	Southern
Hackney Downs	NX East Anglia
Hadley Wood	First Capital Connect
Hampton	South West Trains
Hampton Court	South West Trains
Hampton Wick	South West Trains
Hanwell	First Great Western
Harold Wood	NX East Anglia
Harringay	First Capital Connect
Haydons Road	First Capital Connect
Hayes & Harlington	First Great Western
Hayes (Kent)	Southeastern
Hendon	First Capital Connect
Herne Hill	Southeastern
Highams Park	NX East Anglia
Hither Green	Southeastern
Honor Oak Park (See Note 2)	Southern
Hornsey	First Capital Connect
Hounslow	South West Trains
Ilford	NX East Anglia
Isleworth	South West Trains
Kenley	Southern
Kent House	Southeastern
Kew Bridge	South West Trains
Kidbrooke	Southeastern
King's Cross (National Rail station)	First Capital Connect
Kingston	South West Trains
Kingswood	Southern
Knockholt	Southeastern
Ladywell	Southeastern
Lee	Southeastern
Lewisham (National Rail station)	Southeastern
Limehouse (National Rail station)	c2c

Liverpool Street (National Rail station)	NX East Anglia
London Bridge (National Rail station) 1-6	Southeastern
London Bridge (National Rail station) 8-16	Southern
London Fields	NX East Anglia
Loughborough Junction	First Capital Connect
Lower Sydenham	Southeastern
Malden Manor	South West Trains
Manor Park	NX East Anglia
Maryland	NX East Anglia
Marylebone	Chiltern
Maze Hill	Southeastern
Mill Hill Broadway	First Capital Connect
Mitcham Eastfields	Southern
Mitcham Junction	Southern
Morden South	First Capital Connect
Mortlake	South West Trains
Motspur Park	South West Trains
Mottingham	Southeastern
New Barnet	First Capital Connect
New Beckenham	Southeastern
New Cross	Southeastern
New Cross Gate (See Note 2)	Southern
New Eltham	Southeastern
New Malden	South West Trains
New Southgate	First Capital Connect
Norbiton	South West Trains
Norbury	Southern
North Dulwich	Southern
North Sheen	South West Trains
Northolt Park	Chiltern
Northumberland Park	NX East Anglia
Norwood Junction (See Note 2)	Southern
Nunhead	Southeastern
Oakleigh Park	First Capital Connect
Ockendon	c2c
Orpington	Southeastern
Paddington (National Rail station)	First Great Western
Palmers Green	First Capital Connect
Peckham Rye	Southern
Penge East	Southeastern
Penge West (See Note 2)	Southern
Petts Wood	Southeastern
Plumstead	Southeastern
Ponders End	NX East Anglia
Purfleet	c2c
Purley	Southern
Purley Oaks	Southern
Putney	South West Trains
Queens Road Peckham	Southern

Queenstown Road Battersea	South West Trains
Rainham (Essex)	c2c
Ravensbourne	Southeastern
Raynes Park	South West Trains
Rectory Road	NX East Anglia
Reedham	Southern
Richmond	South West Trains
Riddlesdown	Southern
Romford	NX East Anglia
Sanderstead	Southern
Selhurst	Southern
Seven Kings	NX East Anglia
Shortlands	Southeastern
Sidcup	Southeastern
Silver Street	NX East Anglia
Slade Green	Southeastern
Smitham	Southern
South Bermondsey	Southern
South Croydon	Southern
South Greenford	First Great Western
South Merton	First Capital Connect
Southall	First Great Western
Southbury	NX East Anglia
St Helier	First Capital Connect
St James Street	NX East Anglia
St Johns	Southeastern
St Margarets	South West Trains
St Mary Cray	Southeastern
St Pancras International	First Capital Connect
Stamford Hill	NX East Anglia
Stoke Newington	NX East Anglia
Stoneleigh	South West Trains
Stratford (See Note 1)	NX East Anglia
Strawberry Hill	South West Trains
Streatham	Southern
Streatham Common	Southern
Streatham Hill	Southern
Sudbury & Harrow Road	Chiltern
Sudbury Hill Harrow	Chiltern
Sundridge Park	Southeastern
Surbiton	South West Trains
Sutton	Southern
Sutton Common	First Capital Connect
Sydenham (See Note 2)	Southern
Sydenham Hill	Southeastern
Syon Lane	South West Trains
Tadworth	Southern
Tattenham Corner	Southern
Teddington	South West Trains

Thames Ditton	South West Trains
Thornton Heath	Southern
Tolworth	South West Trains
Tooting	First Capital Connect
Tulse Hill	Southern
Turkey Street	NX East Anglia
Twickenham	South West Trains
Upminster	c2c
Upper Warlingham	Southern
Vauxhall (National Rail Station)	South West Trains
Victoria (National Rail Station) 1-8	Southeastern
Victoria (National Rail Station) 9-19	Southern
Waddon	Southern
Wallington	Southern
Walthamstow Central (See Note 1)	NX East Anglia
Wandsworth Common	Southern
Wandsworth Road	Southern
Wandsworth Town	South West Trains
Waterloo (National Rail station)	South West Trains
Waterloo East	Southeastern
Watford Junction	London Midland
Welling	Southeastern
Wembley Stadium	Chiltern
West Croydon (See Note 2)	Southern
West Drayton	First Great Western
West Dulwich	Southeastern
West Ealing	First Great Western
West Hampstead Thameslink	First Capital Connect
West Norwood	Southern
West Sutton	First Capital Connect
West Wickham	Southeastern
Westcombe Park	Southeastern
White Hart Lane	NX East Anglia
Whitton	South West Trains
Whyteleafe	Southern
Whyteleafe South	Southern
Wimbledon	South West Trains
Wimbledon Chase	First Capital Connect
Winchmore Hill	First Capital Connect
Wood Street	NX East Anglia
Woodmansterne	Southern
Woolwich Arsenal (National Rail station)	Southeastern
Woolwich Dockyard	Southeastern
Worcester Park	South West Trains

Note 1: In respect of each of the Stations to which this note applies: -

(i) the Parties acknowledge that there is PAYG Equipment at that station which is the responsibility of DLR or LUL not the Operators. This is the PAYG Equipment located at that station which is not the subject of the Operator's Services Agreement from time to time.

(ii) accordingly the following provisions shall not apply in respect of the DLR or LUL PAYG Equipment referred to in (i):-

- Clause 9.1(d) and Schedule 14 paragraph 9 of the PAYG Agreement
- Schedule 2 paragraph 3.2 of the Services Agreement.

Note 2: In respect of each of the Stations to which this note applies: -

(i) the Parties acknowledge that the PAYG Equipment is the responsibility of LOROL, not the Operators. This PAYG Equipment is not the subject of the Operator's Services Agreement from time to time.

(ii) accordingly, the provisions of Schedule 4 shall not apply in respect of the PAYG Equipment referred to in (i).

Fares shown are those as at the date of the Agreement

Table 15.2 London Overground Stations

Acton Central
Brondesbury
Brondesbury Park
Bushey
Caledonian Road & Barnsbury
Camden Road
Canonbury
Carpenders Park
Crouch Hill
Dalston Kingsland
Finchley Road & Frognal
Gospel Oak
Gunnesbury
Hackney Central
Hackney Wick
Hampstead Heath
Haringay Green Lanes
Harlesden
Harrow & Wealdstone
Hatch End
Headstone Lane
Homerton
Imperial Wharf
Kensal Green
Kensal Rise
Kensington Olympia
Kentish Town West
Kenton
Kilburn High Road
Kew Gardens
Leyton Midland Road
Leytonstone High Street
North Wembley
Queens Park
Shepherd's Bush (London Overground station)
South Acton
South Hampstead
South Kenton

South Tottenham
Stonebridge Park
Upper Holloway Road
Walthamstow Queens Road
Wanstead Park
Watford High Street
Wembley Central
West Brompton
West Hampstead LO
Willesden Junction
Woodgrange Park

Part 3 - Stations/other locations where Operators retail TTL Smartmedia and/or PAYG fare products contained in those media

The list of stations at which Operators retail TTL Smartmedia and PAYG fare products contained on them as at the date of this Agreement is set out in Appendix 1 to this Schedule. The Appendix shall be varied from time to time to take account of any changes to the list pursuant to Schedule 8 of the Agreement.

APPENDIX 1 TO SCHEDULE 3

List of Stations/other locations at which Operators retail TTL Smartmedia and/or PAYG fare products contained in those media as at the date of this Agreement

Station or Location	Operator
Balham	Southern
Barking	C2C
Battersea Park	Southern
Beckenham Junction	Southeastern
Belmont	Southern
Blackfriars	First Capital Connect
Carshalton Beeches	Southern
Carshalton TO	Southern
Caterham	Southern
Cheam	Southern
Chipstead	Southern
Clapham High St	Southern
City Thameslink	First Capital Connect
Coulsdon South	Southern
Drayton Park	First Capital Connect
Ealing Broadway	First Great Western
East Croydon	Southern
East Dulwich	Southern
Elmers End	Southeastern
Epsom Downs	Southern
Essex Road	First Capital Connect
Euston (National Rail Station)	London Midland
Ewell East	Southern
Fenchurch Street	c2c

Finsbury Park	First Capital Connect
Gipsy Hill	Southern
Greenwich	Southeastern
Hackbridge	Southern
Hackney Downs	NX East Anglia
Ilford	NX East Anglia
Kenley	Southern
Kingswood	Southern
Lewisham (National Rail Station)	Southeastern
Limehouse (National Rail Station)	c2c
Liverpool Street (National Rail Station)	NX East Anglia
Marylebone	Chiltern
Mitcham Eastfields	Southern
Mitcham Junction	Southern
New Cross	Southeastern
Norbury	Southern
North Dulwich	Southern
Peckham Rye	Southern
Purley Oaks	Southern
Purley TO	Southern
Queens Road Peckham	Southern
Reedham	Southern
Richmond	South West Trains
Riddlesdown	Southern
Sanderstead	Southern
St Pancras International	First Capital Connect
Selhurst	Southern
Smitham	Southern
South Croydon	Southern
Stratford	NX East Anglia
Streatham Common	Southern
Streatham Hill	Southern
Streatham TO	Southern
Sutton	Southern
Tadworth	Southern
Tattenham Corner	Southern
Thornton Heath	Southern

Tulse Hill	Southern
Upminster	c2c
Upper Warlingham	Southern
Victoria TO	Southern
Waddon	Southern
Wallington	Southern
Walthamstow Central	NX East Anglia
Wandsworth Common	Southern
Wandsworth Road	Southern
Watford Junction	London Midland
West Norwood	Southern
Whyteleafe South	Southern
Whyteleafe TO	Southern
Wimbledon	South West Trains
Woodmansterne	Southern
Woolwich Arsenal	Southeastern

SCHEDULE 4

TTL Services

Part 1: Form of Services Agreement

1. TTL and each Operator shall enter into a Services Agreement in the form set out in Appendix 1 to this Schedule 4.
2. The Parties agree that the TTL Services provided under Services Agreements entered into by them are subject to change in accordance with Clause 17 of this Agreement.
3. TTL shall have responsibility to deliver the TTL Services irrespective of the level of PAYG usage on the Operator Services.
4. TTL Charges are calculated on the basis that TTL and not the Operators are responsible for the cost of PAYG related services at the Joint Stations.
5. Without prejudice to any other provision of this Agreement or the Services Agreement, the TTL Charges (as they may be varied in accordance with this Agreement and the Services Agreement from time to time) represent all the payments payable by the Operators to TTL for the TTL Services.
6. The TTL Charges all represent payments for TTL Services; however they have been structured in a manner to provide transparency as to the cost components for the relevant services as more fully described in Part II of this Schedule.
7. Except where otherwise specifically stated in Appendix 3 to this Schedule 4, the pricing principles set out in Part III of this Schedule shall apply to the TTL Charges and to any change in the TTL Charges arising from any change in respect of the TTL Services under Clause 17 of this Agreement or Clause 7 of the Services Agreement. However, the TTL Charges shall only be subject to change from the date specified for such TTL Charges to be reviewed (or the date determined under Clause 17 of this Agreement or under Clause 7 of the Services Agreement, as the case may be) and no such changes shall be applied retrospectively unless explicitly agreed by the Parties in writing.
8. TTL shall not be able to claim payment from an Operator of any TTL Charges payable by another Operator.
9. If and when any change in respect of the TTL Services under Clause 17 of this Agreement or Clause 7 of the Services Agreement is agreed or determined, TTL and each Operator agree: -
 - (a) that the Services Agreement between them will be automatically deemed to have been amended as required to give effect to that change; and
 - (b) without prejudice to (a), the Operator will, if requested by TTL, enter into a separate agreement making those amendments to their Services Agreement.

Part II: Description of the TTL Services

Each of the TTL Services shall be as defined in Appendix 2 of this Schedule 4, and the description of each TTL Service shall include but not be limited to a description of how the service will be performed, who will provide the service, any unique terms associated with that service, any associated performance measures, and the reports to be provided.

Part III: The Charges

The TTL Charges applicable to each of the TTL Services detailed in Appendix 2 and chargeable under each Services Agreement shall be determined by reference to the rates and prices shown in Appendix 3 to this Schedule 4. Appendix 3 shall state in relation to each TTL Service:

- a) each TTL Charge;
- b) how each TTL Charge is calculated;
- c) the applicable methodology to be used for dividing each TTL Charge between the Operators, or for calculating the TTL Charge to be paid by each Operator;
- d) when (if at all) the TTL Charge (or part thereof) is subject to review (such review to be carried out in accordance with the principles and process set out in paragraph 1 of this Part III); and
- e) the indexation, if any, to apply to the TTL Charge. For the avoidance of doubt where Appendix 3 expressly provides that indexation shall apply, the TTL Charges contained therein are subject to indexation in accordance with paragraph 3 of this Part III.

1 Pricing Review Principles

The Parties acknowledge and shall apply the following pricing principles in the review of (and the consequential development, negotiation, and apportionment of revisions to) the TTL Charges:

- (a) The TTL Services are provided as an extension of a wider PAYG system and associated services already operated by TTL.
- (b) TTL shall procure and provide the TTL Services and/or the PAYG System (including PAYG Equipment) under this Agreement in a manner consistent with achieving the objective of delivering Value For Money for TTL and the Operators.
- (c) TTL shall not make any specific provision in the TTL Charges for making a profit.
- (d) In determining the extent of the TTL Charges, the review shall take full account of the anticipated level of usage of the Operators for that TTL Service, as agreed in writing by the Operators. However, it is acknowledged that a change in the extent of the Operators' usage does not necessarily result in a change in the TTL Charges.
- (e) The TTL Charges are intended to reflect the scope of the TTL Services and represent the cost to TTL of the provision of the TTL Services (including direct and indirect costs, overheads and an appropriate allowance for the risk inherent in TTL's associated obligations under the PAYG Agreement, any Implementation Agreement and Services Agreement) to the Operators over the costs of providing the services to the TTL Group.
- (f) TTL shall apply good industry practice with respect to the procurement and provision of the TTL Services and the PAYG System (including PAYG

Equipment) as appropriate under this Agreement, subject to TTL not being obliged to sub-contract TTL Services where such services are not sub-contracted at the date of this Agreement.

- (g) In the calculation of the TTL Charges, TTL will apply common rates and prices for all Operators.
- (h) Each Operator may vary the quantity of the TTL Service provision and/or request any additional services in accordance with Clause 17 of this Agreement and/or Clause 7 of the Operator's Services Agreement, where applicable.
- (i) TTL shall use all reasonable endeavours to maintain or improve the TTL Services for the same or a lower cost to the Operators and:-
 - (A) where and to the extent that, in accordance with and through the operation of the other provisions of this Agreement, this results in a cost saving to be passed on to the Operators, that pass through shall take place to the extent and at the time provided through the operation of such other provisions; and
 - (B) without prejudice to any other provision of this Agreement, if such improvement requires capital investment the Operators recognise that they may be requested to make an equitable contribution to such investment in order to derive any associated benefits. For the avoidance of doubt the Operators are not obliged to make such a contribution, but if they do not do so, and without limiting any other justification TTL may have in accordance with the terms of this Agreement for not making the relevant improvement, TTL shall not be obliged to undertake an improvement that requires a capital investment.
- (j) Having regard to the information in the possession of TTL at the time (or which would have been in its possession if TTL had complied with its obligations hereunder to consult with ATOC) and in so far as is within its power, TTL shall take all reasonable care not to procure and/or provide any TTL Services in a manner which disadvantages the Operators in comparison to members of the TTL Group who are also receiving the same services.

2 Pricing Review Process

The Parties intend that the TTL Charges set out in the table in Appendix 3 to this Schedule 4 shall (except where otherwise specifically stated in Appendix 3) be reviewed in accordance with the following procedure.

- 2.1 Such review shall be conducted on each occasion when:
 - (a) the first or subsequent specified review dates (to be agreed in accordance with paragraph 2.2 (f) if not set out in Appendix 3) are reached; and
 - (b) subject to TTL's obligations to compensate in respect of any Required Change in accordance with Schedule 9 section 2.6(b), TTL makes a material change to the specifications for the PAYG Equipment or any other aspect of the PAYG System through Clause 17 of this Agreement. Such a review to be limited to those costs subject to the relevant Change.
- 2.2 Such review as set out in paragraph 2.1 shall comprise the following:
 - (a) The Parties shall meet to agree a timetable for the review.
 - (b) Where the TTL Services are not being subcontracted by TTL then TTL shall provide to ATOC all information as reasonably necessary for the Operators to evaluate the associated TTL Charges, including but not limited to, details

of the utilisation, performance, resources and costs associated with the provision of those TTL Services during the period.

- (c) Where TTL is procuring the provision of the TTL Services by subcontract then:
- (i) The Operators acknowledge that TTL has legal obligations in relation to public procurement and that the provisions set out below do not seek to compromise and are subject to any such obligations on TTL.
 - (ii) Subject to (i) above, TTL shall notify ATOC of such procurement in advance and thereafter consult with ATOC and, wherever reasonably desirable in TTL's reasonable opinion shall incorporate ATOC's reasonable requirements, amendments or proposals into the specification and the terms of the proposed subcontract insofar as they relate to the TTL Services and /or relevant elements of the PAYG System (including PAYG Equipment). Such requirements, amendments or proposals will not be considered to be reasonable if they will or may: -
 - (1) affect the risk allocation between TTL and the subcontractor to the detriment of TTL or otherwise impose any additional risk or obligation on TTL;
 - (2) result in any additional cost or liability being incurred by TTL;
 - (3) be inconsistent with any declared TTL policy;
 - (4) result in TTL not being able to subcontract or incur material delay in it being able to do so; or
 - (5) otherwise operate to the material detriment of TTLand where requested TTL will provide a reasonable explanation or evidence of the above where it seeks to rely on such.
 - (iii) Subject to paragraph (i) and the provisos to (ii) above, TTL shall consult with ATOC with respect to any revisions to the specification for the subcontract services made during the procurement process.
 - (iv) To the extent that any information relating to a tender being undertaken by TTL is disclosed to ATOC and/or the Operators, this will be considered confidential and ATOC and/or the Operators undertake to keep it confidential. Any such disclosure and distribution of such information may be restricted to the extent required to ensure compliance with data protection legislation and to avoid compromise to any procurement process undertaken by TTL. Each of the Operators acknowledge and will procure that ATOC will not disclose confidential information to an Operator where that Operator has a conflict of interest with regard to the procurement. Each Operator is under a duty to notify ATOC and TTL if and as soon as it becomes aware of any conflict of interest in respect of any proposed sub-contracting.
 - (v) Without prejudice to paragraph (iv) where appropriate TTL shall use all reasonable endeavours: -
 - (1) to avoid accepting obligations of confidentiality which would preclude or restrict and/or
 - (2) to procure the consent of any potential supplier of the TTL Services and any relevant aspect of the PAYG System (including the PAYG Equipment) to

the disclosure of any information to the Operators which the Operators reasonably require and is necessary for the pricing review in accordance with this Part III, section 2, of Schedule 4.

- (d) The Parties may exchange any information regarding benchmarking or other comparisons which may be relevant to the future delivery of the TTL Services (which in the case of TTL will be provided to ATOC). If the Parties agree that it would be appropriate the Parties may engage a third party to conduct independent benchmarking the costs of which shall be shared between the Parties.
- (e) TTL will make proposals to the Operators for revised TTL Charges and the associated review periods for incorporation into this Agreement.
- (f) The Parties will endeavour to agree the revised TTL Charges (and associated review periods) for incorporation into this Agreement. In the absence of such agreement the Operators will provide within 28 days of request by TTL for the purpose of this paragraph a formal written statement detailing their objections to the TTL proposal. The matter will then be referred to the dispute resolution procedure under Clause 22 of this Agreement for resolution in accordance with the Pricing Review Principles in paragraph 1 of this Part III. In the interim the Operators will be obliged to continue to pay the existing TTL Charges including any requirement for additional indexation until the matter is resolved at which time reconciliation shall be performed.

3. Indexation

3.1 It is agreed that

- (a) subject to paragraph 3.1(b), those TTL Charges which are subject to indexation (as indicated in Appendix 3 to this Schedule 4) will be indexed for each and every Period from and including June 2008 by reference to the change in value of the Retail Prices Index for June 2007 in accordance with the formula set out in paragraph 3.2;
- (b) if (whether as a result of any review of the TTL Charges pursuant to paragraphs 1 and 2 of this Part III, or the making of any change to the TTL Services pursuant to Clause 17 of this Agreement or Clause 7 of the Services Agreement, or otherwise) any element of the TTL Charges in the future is not based on June 2007 prices, then when the level of that TTL Charge is agreed or determined:-
 - (i) there will also be agreed or determined the basis (if any) on which that TTL Charge will be indexed; and
 - (ii) where and to the extent such TTL Charge is based on charges payable by TTL to a sub-contractor, such indexation will be consistent with the indexation applied by the relevant TTL sub-contractor(s), except where TTL has failed to comply with the applicable Pricing Review Principles (as set out in Part III, paragraph 1 of this Schedule 4) when entering into such sub-contract, in which case the provisions of paragraph 3.1 (b) (iii) below shall apply; and
 - (iii) where and to the extent that such TTL Charge is not based on charges paid to a sub-contractor, or as stated in paragraph 3.1 (b) (ii) above, such indexation will, unless otherwise agreed, reflect the principle of variation in line with the change in the value of the Retail Prices Index by reference to the value of the Retail Price Index for

the month of June which immediately precedes the date on which the charges were quoted.

3.2 The formula referred to in paragraph 3.1(a) is as follows:-

$$(\text{Indexed Amount})_{NP} = \frac{r_n}{r_o} \times (\text{indexable Amount})_{NP}$$

where

Indexed Amount = the amount to be paid by the Operator in respect of the applicable TTL Charge after it has been indexed

NP = the relevant Period in respect of which the applicable TTL Charge is payable (which for the avoidance of doubt the Parties acknowledge is not the Period in which it is invoiced, because invoices are raised in arrears)

r_n = the value of the Retail Prices Index published for the month of June immediately preceding the Period in respect of which the Indexable Amount is to be calculated (or, where that Period commences in June in any year, shall be the value of the Retail Prices Index for that June)

r_o = the value of the Retail Prices Index published for June 2007

Indexable Amount = the original value of the applicable TTL Charge as at the date of signature of this Agreement.

and 'Period' is as defined in and for the purposes of the Services Agreement.

3.3 Where the value of the Retail Prices Index required for the calculation in paragraph 3.2 is not known in time for TTL to reflect the variation in the invoice for any Period, TTL will:-

- (a) be entitled to invoice the Indexable Amount; and
- (b) undertake a reconciliation when the required value of the Retail Prices Index is known and further invoice (or credit, in the case of a reduction in the value of the Retail Prices Index) the Operators in respect of the required adjustment determined by the reconciliation.

3.4 If any index, or any publication or the information derived from any such publication, referred to in this Agreement ceases to be published, then such alternative index or publication or information which the Parties agree (or which in the absence of agreement is determined pursuant to Clause 22) produces as nearly as possible the same result or gives the same information shall be substituted therefore, and if the reference date used in the compilation of any such index or information shall change, the figure taken for the purposes of this Agreement to be shown in such index or information shall be the figure which would have been shown in the index or information if the original reference date had been retained.

3.5 If there has been a material change in the basis of information from which the index is compiled which produces a significant change to the indexation provisions contained in this Agreement or it becomes impossible, by reason of any change after the date hereof in the method used to compile any such index or information or for any other reason whatever, to calculate the amounts by which the sums

payable hereunder should be adjusted by reference to any such index or information or any alternatives thereto, the Parties shall agree (or in the absence of such agreement there shall be determined pursuant to Clause 22) such alternative method of adjusting the last available reference charge payable under this Agreement as a basis for the making of subsequent payments under this Agreement as most closely reflects the intent of the index or information in question.

4. Impact of Operator(s) ceasing to participate

The Parties acknowledge and agree that:-

- 4.1 TTL has structured and calculated the level of the TTL Charges based on the total number of Operator Stations of all Operators who are signatories to this Agreement, including for those TTL Services which are not directly related to the number of Operator Stations.
- 4.2 Pursuant to Clause 18 of the Agreement, the participation of one or more individual Operators ("Excluded Operator(s)") may terminate without:-
 - (a) the PAYG Agreement terminating in its entirety; and
 - (b) one or more Successor Operator(s) immediately becoming party to this Agreement in respect of Operator's Stations of the Operator(s) ceasing to participate.
- 4.3 In the circumstances described in paragraph 4.2:-
 - (a) TTL will not adjust the amount of the TTL Charges payable by the remaining Operators to take account of the future non-receipt of the TTL Charges which were being paid by any Excluded Operator;
 - (b) when the amount of the TTL Charges are to be reviewed or revised (whether pursuant to a price review in accordance with this Part III or following the application of the Change Control Procedure or otherwise), then the TTL Charges shall continue to be calculated on the basis of an assumption that any Excluded Operator:-
 - (i) is still a party to this PAYG Agreement; and
 - (ii) operates those Operator Station(s) which it operated whilst it was a party to this Agreement, if and for so long as those stations are not operated by any Operator or Successor Operator who remains a Party to this Agreement.
- 4.4 In a situation where by agreement between TTL and the relevant Operator and/or between TTL and the Secretary of State:-
 - (a) an Operator ceases to be the Station Facility Owner at an Operator Station and is to cease to be responsible for the payment of TTL Charges in respect of that station (a "Transferring Station"); and
 - (b) a TTL subsidiary of a TTL Third Party becomes the Station Facility Owner in respect of that Transferring Station and is to become responsible for the payment of TTL Charges in respect of that station

then for the avoidance of doubt, for the purpose of working out the per station unit price for those TTL Charges which are calculated by reference to the number of Operator Stations within the total number of applicable stations, these shall continue to be calculated as if the Transferring Station was an Operator Station (even though no Operator is to be responsible for the TTL Charges in respect of that Transferring Station).

5. Abatement of TTL Charges

5.1 The Parties acknowledge that:-

- (a) Part C of Appendix 3 to this Schedule 4 details the abatement regime applicable to certain of the TTL Charges as at the date of this Agreement;
- (b) there is an opportunity for TTL to seek to vary the arrangements with the Ticketing Services Provider relating to abatements of charges and service levels:-
 - (i) under the interim contract ("the Interim Contract") which TTL has entered into with Cubic Transportation Systems Limited, and which will take effect in 2010, following the expiry of the contract which TTL has with the current Ticketing Services Provider as at the date of this Agreement; and
 - (ii) under the new contractual arrangements which will be required to replace the Interim Contract, following its expiry in 2013 ("the 2013 Arrangements").

5.2 ATOC (on behalf of all the Operators) may request TTL to seek a change to the arrangements with the Ticketing Services Provider relating to abatements of charges and service levels in the Interim Contract, and corresponding amendments to the terms of this Agreement, on the basis and condition that the change will be at no cost or additional risk to TTL, including in respect of any exposure to TTL in respect of the period following the termination of the participation of any Operator.

TTL will use its reasonable endeavours to agree such a change with the Ticketing Services Provider and any corresponding amendments to this Agreement with ATOC on behalf of the Operators.

5.3 The following provisions shall apply in respect of the 2013 Arrangements: -

- (a) ATOC (on behalf of all the Operators) may request TTL to consider changes to the terms of this Agreement relating to abatements of charges and service levels with effect from the commencement of the 2013 Arrangements.
- (b) If ATOC and TTL are unable to agree such changes, then as part of the procurement process for the provision by a third party of any relevant aspect of the TTL Services for the 2013 Arrangements:
 - (i) the requirements which ATOC may request TTL to include in the specification and/or terms of the proposed subcontract, pursuant to paragraph 2(c)(ii) of this Part III, shall include (provided they are reasonable in accordance with the terms of that paragraph) terms for a revised service level and/or abatement regime for the relevant TTL Services and the associated TTL Charges ("the Operators'

Service Level Regime"). This will be on the basis that the Operators' Service Level Regime is a variant proposal and all additional costs and risks thereof are to be separately identified and quantified and be capable of being passed by TTL to the Operators;

(ii) if requested by ATOC, TTL will use reasonable endeavours to agree with ATOC changes to this Agreement to take account of the terms offered by the successful incoming subcontractor as part of the 2013 Arrangements in respect of the Operators' Service Level Regime, on the basis and condition that the changes to the terms of this Agreement will be at no cost or additional risk to TTL, including in respect of any exposure to TTL in respect of the period following the termination of the participation of any Operator.

(c) subject to the conditions in paragraph 5.3(b)(ii) being satisfied and TTL and ATOC agreeing corresponding changes to this Agreement on that basis, then if requested to do so by ATOC, TTL will use all reasonable endeavours to enter into the 2013 Arrangements on the basis of the terms offered by the incoming subcontractor in respect of the Operators' Service Level Regime (or such other terms as the Parties may agree).

Part IV: Remedial Plans

Without prejudice to the terms of Part C of Appendix 3 to this Schedule 4, if for each of 3 consecutive Periods there has been a continuing or repeated breach of a TTL obligation in respect of the provision of the TTL Services (such that TTL is in breach of that obligation in each of those Periods) then TTL will:-

- (i) produce, deliver to the TOCs and implement an appropriate remedial plan in respect of the relevant obligation;
- (ii) report on the implementation of the remedial plan at Service Delivery Group meetings, and advise the Service Delivery Group when the breach has been remedied.

APPENDIX 1 TO SCHEDULE 4

Form of Services Agreement

Please see the attached document

APPENDIX 2 TO SCHEDULE 4

Description of the TTL Services

The Parties agree and acknowledge that in places this Appendix 2 sets out the processes used at the date of this Agreement to provide the output required of the particular service. As such, the Operators agree that whilst the output is subject to change only by agreement of the Parties, notwithstanding any other provision of this Agreement the processes used to achieve such outputs are subject to the Change Control Procedure.

Appendix 2.1

Service Title: TTL Help Line

Description

The TTL Help Line service undertakes the first line customer support on behalf of TTL and the Operators relating to customer queries and comments in relation to the use of PAYG.

Basis of Provision

The TTL Help Line comprises a customer service team specially trained to support PAYG and is trained in the operational and business rules appertaining to PAYG on the TTL network and the Operators' networks, including, but not limited to, the differences between fares, conditions of carriage and rules applying to the Operators' networks and services, and those applying to TTL networks and services.

The TTL Help Line service provides support to customers using PAYG for payment on the Operators' networks through the following services:

- (a) advice including the correct way to use PAYG, including where the use of PAYG is valid;
- (b) resolution of queries relating to charges made by the PAYG System;
- (c) refunds of PAYG value; and
- (d) correction of errors made by the PAYG System.
- (e) the provision of data for authorised personnel in accordance with Clause 32.6

In addition the TTL Help Line facility provides services that are outside the scope of this Agreement and are not chargeable to the Operators. These non chargeable services include but are not limited to: all retailing services, all card fulfilment services and all customer complaint activity related to the performance of TTL Passenger Services.

In no circumstances shall the TTL Help Line undertake any customer service activity relating to the performance of the Operators' services, including but not limited to those relating to the Operators' Customer Charter commitments. In all circumstances TTL shall refer such enquiries

to the Operator and in no circumstances will it make any admission of fault or pass adverse comment on the relevant Operator.

At date of signature of this Agreement the service is provided directly by TTL using personnel staff housed in TTL facility in central London and utilises TTL's own CRM system.

The TTL Help Line service shall:

- (a) have a single dedicated telephone number to be made available by TTL for TTL and Operator customers;
- (b) accept customer enquiries by telephone, e-mail or letter and respond using the same media;
- (c) be a service dedicated to supporting ticketing utilising TTL Smartmedia (and also smartmedia for journeys made using Travelcards) and shall not be used to support any other ticketing media; and
- (d) be the sole recipient of any TTL Smartmedia related enquiries received via the Transport for London website.

TTL shall extend the provision of the current TTL Help Line service to customers making PAYG Journeys on the Operators' Services in accordance with the following principles:

- (a) The TTL Help Line shall be the sole help desk service to provide the services defined in this Appendix 2.1 for all customers using PAYG, irrespective of their mode of travel.
- (b) TTL shall make no differentiation in the training it provides its staff and in the responses of its customer service operatives as between customer queries arising from TfL journeys and Operator journeys subject to applying the appropriate rules applicable to each type of journey in accordance with the PAYG Agreement and the Operating Code of Practice. All staff dealing with customer queries relating to Operator journeys will be trained in the specific rules relating applicable to such journeys.
- (c) The TTL Help Line shall have the responsibility for making PAYG refunds for all customers in accordance with this Agreement and the Operating Code of Practice.

TTL will consult with the Operator on the scripts used for the TTL Help Line and incorporate the Operator's reasonable comments provided in a timely manner. All PAYG customers are treated the same irrespective of mode of transport they have used or intend to use.

Service Levels

"Call Abandon Rate" means the percentage of customers calling the TTL Help Line:

- i) who have not hung up prior to the end of any initial greeting and/or statement of information offered when their call is first connected; and
- ii) who then do not reach the point of i) being answered by a person or ii) selecting an option to receive information other than through speaking to a person.

- (a) In-house performance measurement software based on industry standard monitors performance and records the % of calls abandoned. The Help Line aims to achieve a Call Abandon Rate (as defined in Schedule 4, Part C, paragraph 1) below 10%. The abatement regime set out in Schedule 4, Appendix 3 Part C sets out the remedies available to the Operators in relation to the Call Abandon Rate.
- (b) In-house performance measurement software based on industry standard monitors performance and records the % of calls answered within 20 seconds. The Help Line aims to achieve 80% of calls answered in 20 seconds.

Special Terms

Not Applicable

Performance Measurement

TTL and the Operators agree to collaborate to define reports covering TTL's performance against the Service Levels.

The Parties will agree the format and content of each report before PAYG Launch and will cover areas relating to each Operator and will provide objective performance metrics (including but not limited to: call quantities, durations and subject matter).

Appendix 2.2

Service Title: Control Centre

Description

The Control Centre manages and temporarily adjusts the logic settings for the use of PAYG to charge the correct fare wherever possible when the customers' ability to validate their tickets is impaired by service disruption; PAYG System failure; or the ability to validate is limited at TTL's instruction, such instruction being subject to TTL's and the Operators' agreed charging policy and customer charters as reflected in this Agreement, OCOP or as notified in writing by the relevant Party to the other.

Such temporary adjustments are to be made either in advance of planned events (such as concerts or sports events) or as a response to unplanned events (e.g. station evacuations, full or part line closures) and are to minimise impact on the customers at all times, to preserve revenue and manage such events in a co-ordinated manner.

The Control Centre provides services to the Operators and TTL and as such is not a customer support function and has no interface with members of the public.

Basis of Provision

The Control Centre comprises a service team specially trained to support operation of the PAYG System and is trained in management of the PAYG System and the operational and business rules appertaining to PAYG on the TTL network and the Operators' networks.

The Control Centre will perform daily checks to identify instances where passengers have been overcharged despite following the instruction to undertake Entry Validation and Exit Validation because of a system failure or the incorrect logic settings being applied. Where such overcharges are identified a refund file will be produced and a refund sent to be picked up by the TTL Smartmedia at a station identified as one that is frequently used by that passenger.

Each Operator will receive the same standard reporting from the Control Centre as provided to TTL.

TTL shall extend the provision of the Control Centre service utilised by TTL at the date of this Agreement to cover the use of PAYG on the Operators' networks subject to the following changes:

- (a) the Operators and TTL will, within a reasonable time after the signature date of this Agreement (and in any event prior to the PAYG Launch Date), plan actions and/or scripts required to respond in the event of a disruption in various circumstances which will seek to ensure that in the Control Centre carrying out its function of preventing as far as possible the over-charging of customers, (i) the customers' journey, the operation of each party's network, and charging are unaffected as far as reasonably

possible and (ii) higher priority will not be given to customers from any particular mode. Wherever reasonably possible the Control Centre will use these actions and scripts. Where such actions and scripts are not appropriate in any particular circumstances the Control Centre will determine the appropriate response and/or script and in determining such response and/or script, the Control Centre shall take into account as appropriate the following principles:

- (i) the objective is to charge the correct fare wherever possible; and
- (ii) the conditions of carriage of the applicable Party or Parties (as such are supplied by the applicable Party or Parties to the Control Centre) are to be utilised; and
- (iii) the objective is that the correct Entry Charges and Exit Charges are applied where possible.

In the case of a Successor Operator, the agreed actions and/or scripts will continue to be used, unless the Parties (acting reasonably) agree that it is appropriate to make changes or agree new scripts and/or actions due to the Successor Operator becoming a Party to this Agreement.

- (b) The Operator and TTL will liaise on a regular basis so that each understands how the other responds to planned and unplanned events and what changes to logic settings are required as a consequence.
- (c) The Control Centre will notify the relevant Operator of the implementation of temporary adjustments no later than one week in advance in relation to planned events (if, where an adjustment is to be made at an Operator's request, that Operator has given sufficient notice to enable the Control Centre to do so) and as soon as possible in the case unplanned events.

Special Terms

Not Applicable

Performance Measurement

TTL shall provide reporting of the performance of the Control Centre service in a format and at a frequency to be agreed with the Operators before PAYG Launch, and that shall be in a format and at a frequency no less than that received by TTL.

Appendix 2.3
Service Title: TTL Management Services

Description

The TTL Management Services comprise the services necessary for TTL to manage the provision of the TTL Services and comprise the following:

- (a) Performance and Operations Services;
- (b) Accounting and Revenue Settlement Services;
- (c) Information Services;
- (d) Fares Administration Services; and
- (e) Change and Commercial Management Services.

Where TTL provides the same service to an existing TTL operation, TTL shall extend the provision of this service to the Operators on the same basis as currently provided by TTL, with no differentiation between those TTL operations and each Operator.

Basis of Provision

Performance and Operations Services

TTL shall undertake management of the PAYG System and its subcontractors to ensure performance of its obligations under the Agreement and the Services Agreement including but not limited to:

- (a) monitoring of validation devices to identify PAYG Equipment with no activity and Gate Readers or Validators that are not operating correctly;
- (b) identification and escalation of repeat failures.
- (c) monitoring of trends to identify PAYG Equipment reaching the end of their useful lives and failure levels;
- (d) testing of base data and fares revisions prior to loading into the live PAYG System and subsequent post-implementation monitoring of base data and fares revisions;
- (e) testing of software changes and gaining Operator consent where required to load and launch software changes on the Operator's networks;
- (f) manage and co-ordinate actions between the relevant Operators, TTL, the Ticketing Services Provider and TTL's subcontractors both day-to-day and in the event of a crisis.
- (g) advice and attendance at court as an expert witness where appropriate (or procure such advice and attendance by its subcontractors, where appropriate) in the event of claims or legal action by the Operator in relation to any damage done to any PAYG Equipment by a customer of the Operator or any claims or legal action against the Operator by a customer of the Operator in relation to the PAYG Equipment;
- (h) monitoring performance of the level of service against the service level agreement with the Ticketing Services Provider and formally reviewing these with the Ticketing Services Provider;
- (i) real-time escalation of problem devices;

- (j) provision of management information as reasonably required by the Operator to deal with performance, incidents and staff issues.

Accounting and Revenue Settlement Services

Without prejudice to TTL's obligations under the PAYG Agreement or the Amended Clearance Agreement the accounting service comprises the following:

- (a) Ensuring the correct accounting and revenue allocation for PAYG, which covers:
 - (i) transactional data from all devices live in the system - validation, sales outlets, web based and
 - (ii) all types of transaction including but not limited to Complete Journeys, Incomplete Journeys, refunds, adjustments, gap filling.
- (b) Ensuring that all underlying accounting processes are accurate, complete, valid and timely e.g. gap filling and late data.
- (c) Checking the integrity of transactional details.
- (d) Ensuring that the PAYG System provides the information required under Schedule 7 of the Agreement and the Amended Clearance Agreement.
- (e) Manage PAYG issues including reporting of problems, definition of remedial action and subsequent monitoring to resolution.
- (f) Monitor Financial controls and report on problems and issues.
- (g) Implementing of PAYG accounting developments/variations.
- (h) Monitor/track changes to ticketing software applications and impacts on accounting/reporting/settlement.
- (i) Maintain PAYG documentation to cover:
 - PAYG Journey Scenarios ("Use Cases")
 - Revenue allocation methodology
 - Diagnostics and daily reports.
- (j) PAYG support where there are specific PAYG queries from RSP or an Operator in reference to (i) issues relating to timeliness of generating the Daily Period Revenue files; (ii) specific questions regarding revenue allocation (iii) issues associated with revenue allocation factors (iv) station/device problems impacting PAYG revenue.
- (k) Support on PAYG issues relating to interim and year end audits, by the provision of accounting information, where appropriate.
- (l) TTL will provide the Operators with reports on the performance of the PAYG Systems Operations Service (as defined in Appendix 2.5) detailing the incidents that have occurred, their impact, the corrective actions taken and the actions taken to prevent recurrence. The reports will be provided monthly, two weeks before the Service Delivery Group meetings, at which they will be reviewed as necessary and appropriate.

The revenue settlement services comprise the following:

- (a) the running of daily and period summary files to determine the value of revenue due to the Operators from any transaction where the Operator(s) are due any part of the revenue concerned, and the

- transmission of such files to RSP, in accordance with Appendix 3 of the Amended Clearance Agreement;
- (b) determination of the settlement to be made in respect of each Settlement Period pursuant to Clause 10 and Schedule 7 of the Agreement and Appendix 3 of the Amended Clearance Agreement;
 - (c) the provision of information on retail transactions and commission in accordance with Appendix 4 of the Amended Clearance Agreement;
 - (d) maintenance of the apportionment matrices and their transmission to RSP in accordance with Schedule 7 of the PAYG Agreement;
 - (e) reasonable assistance/advice to RSP and the Operators concerning interpretation and analysis of the above data.

Information Services

Clause 32.2(a) and Clause 32.6 of the Agreement describes the Operators' entitlement to data contained in the central system within the PAYG System. The arrangements described below in this section dealing with Information Services set out the extent of the TTL Services to be provided by TTL in respect of providing access to such data pending any further change as the Parties may agree pursuant to Clause 32.2(b) of the Agreement.

TTL will provide the aggregate time equivalent of one full time employee (the "resource") between the Operators to carry out the services listed below in this section. TTL will therefore carry out this service to the extent that such resource can reasonably carry out the service within the aggregate time equivalent of one full time employee. The proportion of time spent on each Operator by this resource will be a matter for the Operators, not TTL.

The provision of access to, information on or customised reports, including but not limited to the following general headings.

- (a) Usage of PAYG on National Rail
- (b) Device Activity
- (c) Journey History of National Rail PAYG Customers
- (d) Purchase History of National Rail PAYG Customers
- (e) Such Personal Data in respect of PAYG Customers to which an Operator may be entitled to have access pursuant to Clause 32.2(a)(iii) and Clause 32.6 of the Agreement.

This information is available in relation to each card or each Travelcard product or the PAYG Value and can be provided in detail or in summary. TTL's service comprises reports in formats such as one-off reports to deal with specific issues, special exercises to monitor results and regular statistics to monitor usage and behaviour trends.

TTL shall provide this information service by:

- (a) providing advice on the types of data that can be extracted from the PAYG System;
- (b) familiarising the Operator with the range of information;

- (c) capturing requirements for any information to be provided and/or
- (d) providing the report.

The Operator and TTL will need to agree the timing and frequency of any regular or ad hoc reports.

The costs and appropriate service levels for any additional services (including any direct access by the Operators to information) are subject to agreement by the Parties after signature of this Agreement.

Fares Administration Services

Operation of the PAYG fares revision process comprising the following items.

- (a) Analysis and authentication of fares proposals to ensure that anomalies are minimised, consistency is maximised and to analyse impact of fares proposals or revisions on usage trends.
- (b) The preparation of fares data for transmission to the Ticketing Services Provider for loading onto the PAYG System.
- (c) The preparation of Base Data settings required consistent with the provisions of Schedule 3.
- (d) Liaison with the Ticketing Services Provider as required.

TTL shall extend this service to the Operator as follows.

- (a) Provision of individual analysis for each Operator and co-ordination of those requirements with Other Operators.
- (b) Inclusion of Operator stations within the fares data and Base Data settings prepared and supplied to the Ticketing Services Provider having regard to the provisions of Schedule 3 and reasonable requests from Operators
- (c) Provision of analysis of impact of fares revision proposals, TTL's obligations being limited to meeting the reasonable commercial requirements of the Operators in circumstances where some or all of the required data is not readily available to the Operators.
- (d) Represent the Operator at TTL's Fares Revision Steering Group (which is an internal TTL steering group discussing and dealing with the process for fares revisions).
- (e) Preparation of information for TTL and Operator staff.
- (f) Review of TTL and Operator staff communications for accuracy.

The Operator shall provide to TTL sufficient information to enable TTL to provide this service by providing all relevant information reasonably in advance of the 136, 98, 70 and 42 day stages to enable TTL to consider the information at its Fares Revision Steering Group meetings prior to these stages and to supply data to its Ticketing Services Provider in a timely fashion.

Change and Commercial Management Services

- (a) Comprises the commercial management and change management of the contract with the Ticketing Services Provider (and any other relevant TTL sub-contractor) from time to time including the following services.
- (b) Management of the variation to the contract with the Ticketing Services Provider (and any other relevant TTL sub-contractor) from time to time that supports the provision of Services to the Operator.
- (c) The contract administration of the contract with the Ticketing Services Provider (and any other relevant TTL sub-contractor) from time to time and each Operator's Services Agreement by compliance with the rules of this Agreement and the contract with the Ticketing Services Provider (and any other relevant TTL sub-contractor) from time to time .
- (d) Support and manage any changes to the TTL Services and or additional services that may be requested by the Operator.
- (e) Manage and implement any necessary variations to the contract with the Ticketing Services Provider (and any other relevant TTL sub-contractor) from time to time.
- (f) Evaluate and assess any proposals made by the contractor under the contract with the Ticketing Services Provider (and any other relevant TTL sub-contractor) from time to time to ensure contract compliance and value for money.

Special Terms

Not Applicable

Performance Measurement

Not Applicable

Appendix 2.4

Service Title: PAYG Equipment Maintenance

Description

This service covers the support and maintenance of all PAYG Equipment with an objective of ensuring the continuous and uninterrupted capability for customers to validate their TTL Smartmedia on the PAYG System subject to and consistent with:-

- (a) the agreed periods of unavailability described in Clause 17.9; and
- (b) the service levels described in this Appendix.

The measurement of this capability is determined by the availability of the validation devices which are of two types:

- (a) Validator maintenance
- (b) Gate Reader maintenance

Basis of Provision

To deliver the PAYG Equipment Maintenance service TTL and its Ticketing Services Provider shall utilise field service engineers (operating Sunday to Saturday), and a call centre to monitor the equipment and manage the rectification of device failures.

In order to deliver the service and meet the required Service Levels TTL and its Ticketing Services Provider shall undertake:

- (a) Proactive asset/fault monitoring through remote systems before the fault enters the fault management system for rectification, either by remote means with a call to Operator station staff to reset the device or by arranging a visit by a field support engineer.
- (b) Operational TTL/Operator support in rectifying or resolving day-to-day issues with Validators or Gate Readers such as dim screens and missing labels that do not amount to Validator failures.
- (c) Incident management by operating the existing incident escalation process including dispatching an engineer and providing details on calls and call clearance targets.
- (d) Field team leader support in reliance on accurate on-line information which assists prompt diagnosis and resolution of faults.
- (e) Maintenance of asset register for all devices, and logistic control of spares (pursuant to Schedule 14).
- (f) Technical support to all Validators.
- (g) Watchdog functionality provides for an additional board with the Validator to monitor communication with the station computer within the device locally and issue a reset command to hard reset the device and restore communications.
- (h) Engineering
Engineering services cover labour and material needed to perform

repairs on modules returned from the field. All repairs are then to be placed into a buffer stock for deployment with engineers. Spare holdings are to be set to support the operation and managed in such a way as to support the services without the need for dedicated vans and storage facilities.

- (i) **Administration and Management**
This covers the general administration on the contract for the asset register contract reporting and Operator/TTL escalation. An appropriate level of management and supervision is to be allowed for to meet operational and safety requirements.

TTL shall provide this service to the Operator in such a manner as not to differentiate between the Operators and members of the TTL Group.

Service Levels

1. For the purposes of this Appendix 2.4 (and the Validation Abatement Regime in Appendix 3 Part C) the following expressions shall have the following meanings:-

“Excluded Failure” means Failures where:-

a) the cause of the Failure is outside of the control of TTL or its Ticketing Services Provider;

b) the Failure is caused other than by failure in workmanship, material or design of the Device. Examples of such other causes include but are not limited to:-

- i) where the Ticketing and Services Provider deems the Failure is attributable to vandalism;

- ii) use by the Operator its subcontractors and agents other than in accordance with the manuals, operator guides and functional specifications provided for the Device;

- iii) damage caused by the Operator to the Device including by permitting or not preventing exposure of the Device to dust, water or other substance detrimental to the operation of the Device;

- (iv) fire, flood, act of God or other Force Majeure Event;

- (v) power or communications failures attributable to any party other than equipment or services provided by the Ticketing Services Provider;

c) the Failure arises in circumstances where the Operator has not complied with its obligations under the Agreement or the Services Agreement or an Implementation Agreement;

d) the duration of the Failure is less than 10 consecutive minutes (unless such a Failure occurs more than 3 times in one day in which case it shall be treated for this purpose as one Failure commencing at the start of the third such Failure in that day).

“Device” means a Validator or a Gate Reader comprised in the PAYG Equipment;

“Failure” means the loss of ability to validate TTL Smartmedia for the purposes of PAYG during Service Hours except where the failure is an Excluded Failure;

“Minimum Size Requirement” means in respect of a Validation Zone, there shall be no fewer than 2 Validators or 3 automatic gate walkways with Gate Readers in such Validation Zone;

“Minor Vandalism” means low level cosmetic damage including but not limited to:-

- Damage to Target Covers
- Damage to Display Window
- Damage to Front Cover
- Damage to Rear Cover
- Damage to the card reader component housed in a Validator or of the Gate reader which is caused by vandalism and which can be remedied by replacement of that component

and whether or not damage is deemed to have been caused by vandalism will be determined by the Ticketing Services Provider. Graffiti is not vandalism for these purposes and falls outside of the scope of the TTL Services.

“Nominated Stations” means London Bridge, Charing Cross, Victoria, Waterloo East, Cannon Street, Liverpool Street, Waterloo, Fenchurch Street, King’s Cross and Paddington or such other group of 10 stations in Zone 1 as may be requested by ATOC (on behalf of the Operators) provided that:-

(a) such request may (unless otherwise agreed) only be made annually (on or around the anniversary of PAYG Launch); and

(b) the changes shall be implemented by TTL and take effect as soon as reasonably practicable thereafter. TTL shall confirm by notice to ATOC the date on which the change takes effect;

“Primary Incident” means:-

(a) in respect of an Operator Station other than a Nominated Station: the occurrence at any one time of a Failure of more than one Device in a Validation Zone provided that the Validation Zone meets the Minimum Size Requirement; and

(b) in respect of a Nominated Station: the occurrence of such trigger event or circumstances as is agreed in respect of each Validation Zone at a Nominated Station on an individual site/gate array basis

in each case during the Service Hours;

“Secondary Incident” means a Failure of any one or more Device(s) in a Validation Zone which does not constitute a Primary Incident;

“Service Hours” means the period between 06:00 and 22:00 each day except that:-

(a) in the case of the Nominated Stations, it means the period between 06:00 and 00:00; and

(b) once a Primary Incident has occurred at a Nominated Station or Clapham Junction between 06:00 and 22:00, the Service Hours in respect of that incident shall from that time be the period between 05:00 and 01.00

and in each case excluding Christmas Day, which shall be regarded as outside the Service Hours;

“Validation Zone” means a grouping of Devices at an Operator Station:-

(a) determined in accordance with the principle that the Devices within a Validation Zone are sufficiently close together so that if there is a Failure, a passenger could reasonably use any alternative Device within that Validation Zone. It is acknowledged that this means that:-

i) a Validation Zone may not meet the Minimum Size Requirement (in which case the provisions relating to Primary Incidents will not apply to that Validation Zone); and

ii) there may be more than one Validation Zone at an Operator’s Station; and

b) agreed by the Operator with TTL.

2. A Validation Zone is measured as providing 100% functionality when no more than one Device is the subject of a Failure in that Validation Zone.

3. Events will be subject to a target clearance time as set out below:-

Classification	Requirement for fix
Primary Incident	Immediately
Secondary Incident	16 Service Hours
Minor Vandalism	24 hours (ie 1 day) period Monday to Friday except where it is not reasonable to complete a particular repair within that time in which case it will be completed as soon as practicable
Major Vandalism (i.e. vandalism which is not Minor Vandalism, but excluding graffiti)	Target time will be agreed

4. Rectification works associated with vandalism are not part of the TTL Charges and shall be agreed separately between the Operator and TTL and charged on a time and material basis, and be subject to indexation.

Special Terms

Performance Measurement

TTL shall provide reporting of the performance of the PAYG Equipment Maintenance service in a format and at a frequency to be agreed with the Operators before PAYG Launch, and that shall be in a format and at a frequency no less than that received by TTL.

Appendix 2.5

Service Title: PAYG Systems Operations Services

Description:

- (a) Application support to ensure the accuracy of data held in the PAYG System and TTL shall undertake the checks and run the reports specified below to determine what errors and inaccuracies of data are present and take all necessary remedial action to correct such errors and inaccuracies in the data.

This service covers the following:

Daily Checks and Reports

- Morning checks – to check whether the overnight batch jobs completed successfully or not, and whether there were any data errors in the PAYG System during previous 24 hours.
- General application / PAYG System health checks – monitoring of the PAYG System during the day to ensure transaction data and batch data is being loaded.
- Generate daily status reports – These reports record information about the operational status of the PAYG System, including transaction data, batch data, any rejected records, any hotlist or autoload receipt failures and information about the batch jobs run the night before. Any system problems or other issues affecting the functioning of the PAYG System will be included.

Statistics

- Investigation of any potential base data issues reported by customers or highlighted by the morning and general system checks.
- Provide reports on an ad-hoc and regular basis to allow particular areas of the data to be analysed.

Weekly Checks

- Produce trend analysis reports – These reports allow the monitoring of trends over time concerning amount of transaction data and the impact of this on system performance.
- PAYG System housekeeping – Ensuring the successful completion of the weekly rollover and archiving of data.

Month End Reports

- Monthly reports on trend analysis – These reports allow the monitoring of trends over time concerning the loading of transaction data, overnight completion and the dispersal of sublist and ad-hoc load tables to PAYG System devices.

Periodic Preparations and Checks

- Monitoring application and database availability – Produce reports on PAYG System and database availability during the period.
- Ticketing Services Provider service report – Provide reports to compile the period service report which details PAYG System and service performance.
- PAYG System housekeeping – This includes performing the period rollover and archiving of data.

Yearly Preparations and Checks

- Producing reference data for analysis – Ensure yearly summary data reports are produced.
- System housekeeping – Prepare database for the new year's data.

- (b) Fraud management by the identification and disabling of TTL Smartmedia used to carry out fraud in accordance with the PAYG Agreement and OCOP which covers:

Maintenance of Fraud Reduction Documents; Ensuring that procedures/scripts are keep up to date, reviewed, signed off.

Maintenance and Purging of the Hotlist Process Hotlist Request Files (HRF); HRFs are a list of TTL Smartmedia that are to be added to a master list (the "Master Hotlist").

Remove TTL Smartmedia not needed on hotlist; Every day, a number of scripts and activities need to be run to clean up the Master Hotlist.

Sublist Performance & Monitor Operations: Sublists are generated for each PAYG System subsystem (e.g. Bus, Rail) and distributed to devices.

Due to size constraints, the sublists cannot contain all the entries on the Master Hotlist, hence, depending on the device capacities, a prioritised selection of entries is chosen.

Reports are run to analyse the effectiveness of the rules which prioritise the cards and actions taken in order to make them more effective.

Ensure maximum capture of hotlisted cards: A daily status report summarises the fraud, hotlist and related issues for the previous day.

Several graphs and spreadsheets are updated monthly to provide management information, with regards to the fraud risk associated with the cards on the hotlist.

Investigation of Actual Fraud: Report all fraud activity on the Operators' Services to the relevant Operator with details of the fraud, for action as may agreed between TTL and the Operator

Identify & Recommend Counter Measures;

- (c) Configuration and management of the base data for all of the Operator Stations as follows;

Fares Revision – up to 4 a year

A fares revision starts with several meetings where the requirements are agreed (part of the Fares Administration Services, set out in Schedule 4, Appendix 2.3 (TTL Management Services)). These requirements specify what needs to be delivered for that fares revision. Once the requirements have been agreed, the following activities will take place to deliver the fares revision on time and with zero defects:

- Change data as per files from TTL - using pre-defined processes which retrieve the data provided in these files and update the relevant fare data in to the database. Other data changes likely to be made to the database during a fares revision include: changing PAYG business rules; adding new destinations; and creating new products.
- Testing changes - The testing of a fares revision prior to implementation generally involves unit, integration and regression elements. A test facility (i.e., model production environment) is available, incorporating several devices connected to a back office, and the base data testing tool. Any issues found are handled using the test team's defect recording and tracking process.
- Implementing the changes - Within a change management process, the Base Data tables are built for live release to the production environment. The tables are loaded on to the live PAYG System (with an effective date to go live) so that they will be propagated to all devices.
- Testing delivery - conduct comprehensive field tests in order to demonstrate the requirements have been successfully met.
- Additional Fares Revision Work - As part of the fares revision, fares lists (passenger, TTL staff and National Rail staff) will be provided to all stations along with an information pack for the Station Managers highlighting the

details of the fares revision changes. Just before and after the live implementation date, the base data team will be on standby for handling any queries/issues that might arise.

Database Administration

The database administration is a daily activity performed by the base data development team and involves the following tasks:

- Database Version Management - Several versions of the databases are maintained for different needs. A copy of the baselined live database (incorporating the data currently used in the production environment) is available for support along with copies for development work and testing. Previous fares revision baselined live databases are also maintained for support work. Periodic refreshing of the databases is done in order to ensure the live database is in line with the actual data in the production environment.
- Define efficient processes - There are processes associated with the database that allow the efficient management of the fares/settings files provided by TTL. Also when business rules change and new ones are required, then new processes need to be written. This normally involves: analysis, definition of formats for new import files, creation of new tables, and new stored procedures/scripts.
- Management of Data Integrity - Ensure the correct reference/parameter/settings data is available in the base data system. When handling the import files provided by TTL the base data team ensures these files can be successfully processed and loaded in to the database.
- Management of Disk Space - managing the clearing of log files, old fares revision tables, databases, etc. so as to efficiently manage available space for new development work.
- Backups - A daily disk backup of the Base Data databases is made to a server which in turns is backed up to tape and stored off-site.
- Disaster recovery planning

Deal with queries

- Fault fixing of any errors – undertaking an initial investigation into any faults reported or found in production environment testing to establish whether it is a data, software or customer usage related error. If it is data related, then the test facility is used to try and recreate the fault. Once the fault is established to fall within Base Data then action is taken to manage the fixing of the problem and it's subsequent release to the production environment.

Basis of Provision

TTL shall provide this service to the Operator in such a manner as not to differentiate between an Operator and other Operators and/or members of the TTL Group.

Special Terms**Performance Measurement**

TTL shall provide reporting in a format and at a frequency to be agreed with the Operators before PAYG Launch, and that shall be in a format and at a frequency no less than that received by TTL.

Appendix 2.6

Service Title: Wide Area Network Communications

Description:

Wide Area Network (WAN) Communications from the Operator Stations and back offices to the PAYG System utilising commercially available managed WAN services, including but not limited to:

- (a) 64k MPLS Circuits at each station with ISDN backup lines;
- (b) CE router, including maintenance;
- (c) Maintenance of circuit termination on platform;
- (d) Dual or single 2Mbs circuits to each of the Operator's back offices, including router; and
- (e) Support of routers, firewalls, ISA Servers and Certificates, packet inspection software and data flows

Basis of Provision

As at the date of the Agreement, subcontract by Ticketing Service Provider to Cable & Wireless under terms jointly negotiated by the Operators, TTL and the Ticketing Services Provider. TTL and its subcontractor to have full commercial and operational responsibility for the WAN Communications as part of the PAYG System.

Special Terms

Cancellation Charges

The Ongoing Charges component of the costs referred to in Part B of this Appendix 3 as "WAN Communications (Cable & Wireless element-stations)" and "WAN Communications (Cable & Wireless element - back office)".

- i) are payable for 5 years from the Communications Installation Mid Point; and
- ii) are subject to specific cancellation charges in respect of which the Operator may incur liability in the circumstances described in paragraph 5 of Schedule 13.

Magnetic Stripe Data and Operator DGCs

Where an Operator utilises a gate monitoring system ("the Operator DGC") and the implementation of PAYG requires the Operator DGC to utilise the WAN Communications service to send and receive, via the PAYG System, the Operator's data relating to use of magnetic stripe ticketing at the Operator's gates (the "Magnetic Gate Data"), then the TTL Services include the transmission of the Magnetic Gate Data between the Operator's Station Computer (comprised in the PAYG Equipment) and the Operator DGC subject to and in accordance with the following provisions:-

- (i) the Operator is responsible at its own cost for making such equipment system changes as are required to the Operator DGC to enable it to send and receive the Magnetic Gate Data via the PAYG System;
- (ii) the Operator shall consent to the Ticketing Services Provider carrying out such upgrade to the software within the Operator DGC as is required to enable it to send and receive the Magnetic Gate Data via the PAYG System (on the basis that the actual changes to be made are to be agreed by the Operator with the Ticketing Services Provider). Part B of Appendix 3 to Schedule 4 refers to the upgrade required to be made for PAYG Launch;
- (iii) TTL will not be liable for any inability to provide this aspect of the service to the extent and for so long as that inability is caused by failure by the Operator to comply with its obligations in paragraphs (i) and (ii) and during the period of such non-compliance. Where the Operator DGC does not incorporate a facility enabling the transmission of Magnetic Gate Data via the PAYG System to be tested prior to implementation, TTL will not be responsible (under the Services Agreement, any Implementation Agreement or the PAYG Agreement or otherwise) for any resulting failure or deficiency in the transmission of the Magnetic Gate Data but TTL will use all reasonable endeavours thereafter to work with the Operator to remove the cause of the failure or deficiency;
- (iv) In respect of Magnetic Gate Data, TTL will procure that :
 - (1) individual transactions (rather than batches) are queued for processing and forwarding by the PAYG system as soon as they are received;
 - (2) the data is forwarded directly to and from the Operator DGC (rather than via any other system) unless otherwise agreed with the Operator; and
 - (3) the data is forwarded in the form received, without any corruption introduced by the PAYG System;
- (v) The Parties acknowledge and agree that TTL and the Ticketing Services Provider shall be permitted and will have access to the Magnetic Gate Data solely for the purpose of carrying out TTL's obligations under the Agreement, the Services Agreements and any Implementation Agreement (where applicable) and for no other purpose whatsoever; and
- (vi) TTL undertakes not to make any changes to the PAYG System or take any other action which would have the effect of TTL having any greater access to the Magnetic Gate Data than is envisaged for TTL and its Ticketing Services Provider pursuant to paragraph (iv).

For the avoidance of doubt, it is noted that as at the date of this Agreement the Chiltern Railway Company Limited operates a different system to that set out above, and that such system is and (unless

otherwise agreed by TTL) will remain outside of the scope of this Agreement and does not impact upon this Agreement or the TTL Services.

Performance Measurement

TTL shall provide reporting in a format and at a frequency to be agreed with the Operators before PAYG Launch, and that shall be in a format and at a frequency no less than that received by TTL.

Appendix 2.7

Systems Operations Services (for Operators utilising Pearl Devices)

Description

- (a) Application Support, as described in Appendix 2.5, extended to data processing associated with Pearl Devices.
- (b) Fraud Management, as described in Appendix 2.5, extended to Pearl Devices. In particular, the management of a sublist to the master hotlist for downloading to Pearl Devices (subject to processing by the Operator's retail system).
- (c) Configuration and management of Base Data for Pearl Devices. (Deployment of the Base Data, and testing to ensure the Base Data functions correctly in a specific TVM configuration, is not included in this service).
- (d) Subject to (e) below, support and operation of the communications and security solution within the PAYG System necessary to permit the connection to and data flow to / from Operator's retail systems via an internet TVM Retail Connection on the basis that the service is limited to one connection per TVM Supplier (as defined in Appendix 1 to Schedule 8).
- (e) For the avoidance of doubt, TTL reserves the right at any time to disconnect a TVM Retail Connection from the PAYG System if and when TTL reasonably considers necessary in order to protect the integrity or operation of the PAYG System.

Basis of Provision

TTL shall provide this service to each Operator utilising Pearl Devices in such a manner as not to differentiate between an Operator and other Operators and / or members of the TTL Group.

Special Terms

Performance Measurement

TTL shall provide reporting in a format and at a frequency to be agreed with each Operator utilising Pearl Devices before PAYG Launch, and that shall be in a format and at a frequency no less than that received by TTL.

APPENDIX 3 TO SCHEDULE 4

TTL Charges

Introduction

1. Parts A and B of this Appendix 3 contain details of the TTL Charges and shall be interpreted in accordance with the following provisions of this introduction section.
2. Part B sets out the unit numbers and unit rates used to calculate the TTL Charges as at the date of this Agreement, together with the dates when different aspects of the TTL Charges start to be payable. Nothing in Part A shall override Part B in this respect.
3. Where "Total Units" or "Total Charges" or "Total Price" are referred to in this Appendix, these shall be for information only and shall not override the unit rates and unit numbers. It is noted that unit numbers (and therefore total unit numbers and total charges figures) may be varied by Change Control Procedure.
4. Unless expressly stated to the contrary, all rates and prices are as at June 2007 for indexation purposes (where indexation is applicable).
5. The unit rates in Part B are fixed (subject to indexation, where applicable) until the relevant date (if any) stated in Part B for First Price Review. Nothing in Part A shall override those fixed charges. In particular, the sections dealing with "Basis of Charging" and "Charging Methodology" are for background information only and shall not override or create any basis for reopening the unit rates stated in Part B.
6. Except where expressly provided, nothing in Part A shall override the pricing review principles set out in paragraph 1 of Part III of Schedule 4. In particular, the examples of costs taken into account in deriving the fixed costs shall not limit the costs capable of being taken into account under the pricing review principles.
7. Where this Appendix provides for a pricing review, any resulting changes to the TTL Charges arising out of that pricing review shall take effect from the pricing review date stated. If there is any delay in those changes being agreed or determined, in accordance with the process in paragraph 2 of Part III of Schedule 4, there will be a reconciliation back to the effective date.
8. The number of stations used in this Appendix 3 as the basis (where applicable) for calculating the TTL Charges is derived from Table 15 of Part 2 of Schedule 3 as at the date of this Agreement provided that TTL Charges are calculated on the basis that TTL and not the Operators are responsible for the cost of PAYG related services at the Joint Stations.
9. Part C sets out the abatement regime applicable to certain of the TTL Charges.

PART A

Appendix 3.1

3.1 Service Title: TTL Help Line

Total Charge

Maximum TTL Charge for the TTL Help Line per year is [REDACTED]

Basis of Charging

The cost of the TTL Help Line service is largely driven by the number of enquiries made by customers and the TTL Charges associated with the TTL Help Line service will equate to the marginal cost to TTL in providing a TTL Help Line service capable of supporting the Operators' networks in addition to the TTL network. This marginal cost has been derived from the costs for staff, licences, software and hardware, accommodation, training and recruitment.

TTL acknowledges that the Operators' contribution to the funding of the TTL Help Line fully covers the marginal cost described in the paragraph above. The Operators' contribution is made up of the TTL Charges described in this Appendix 3.1 and the Operators' agreement to the provisions of Schedule 16.

Charging Methodology

The TTL Charge for the TTL Help Line is calculated on the basis of apportioning TTL's anticipated marginal costs over the anticipated number of journeys to be made using PAYG on the Operators' Services. Thus the cost per journey would be [REDACTED] and that the TTL Charge will be [REDACTED] for each relevant Entry Validation or Exit Validation recorded at each of the Operator Stations (which for the avoidance of doubt, includes Joint Stations) being the validations made by users at the very start and/or the very end of their journeys respectively. No charge shall be made for mid-journey validations.

It is acknowledged that, in calculating charges the PAYG System aggregates journeys made on both the Operator's and TTL's networks, it is not possible to segregate customers using TTL services from those using the Operator' Services, and that this is reflected in the charging structure at the date of this Agreement.

Special Terms

Indexation

The Maximum TTL Charge and the TTL Charge per relevant Entry Validation and Exit Validation are each at June 2007 levels. Indexation in accordance with the PAYG Agreement shall apply.

Allocation and invoicing of TTL Charges

The TTL Charges in respect of the TTL Help Line shall be allocated and paid as follows:-

Step 1 - the Maximum TTL Charge for the year (after indexation where applicable) is allocated between the Operators. For this purpose, a year commences on the PAYG Launch Date and each anniversary of that date. ATOC will notify TTL of the proportion to be allocated to each Operator (together totalling 100% of the Maximum Total Charge) no later than 1 month prior to the start of the applicable year (and in the case of the first year, 1 month prior to the Anticipated PAYG Launch Date).

Step 2 - Each Operator's proportion calculated in Step 1 will be invoiced to it in equal instalments per Period over the year. These instalments will be subject to abatement in accordance with the TTL Help Line Service Abatement Regime described below.

Step 3 - at the end of the year, TTL will calculate the actual TTL Charges for that year by reference to the total number of relevant Entry Validations and Exit Validations at Operators' Stations in the year. If that calculation shows that the actual TTL Charges (after taking account of abatements made pursuant to Part C of this Appendix 3) are lower than the Maximum TTL Charge (after taking account of such abatements) for that year, each Operator will be entitled to a proportion of the difference based on its proportion of the Maximum Total Charge. The adjustment will be made by way of credit against the next TTL Charges invoice following the determination of the amount of the overpayment. For the avoidance of doubt, the Operators shall not be liable to make any further payment where the total is higher than the Maximum Total Charge.

Review Date

The TTL Charge is not subject to review.

Review Process

Not Applicable

3.2 Service Title: Control Centre

Total Charge

Total cost of Control Centre to be apportioned over a total of 616 stations (comprising 369 TTL stations and 247 Operator Stations), so that the total to be apportioned over the 247 Operator Stations is [REDACTED]. The total number of TTL Stations includes the Joint Stations where the associated TTL Charges shall be met by TTL, and the 10 Operator Stations which were previously Operator Stations of New Southern Railway Limited, where LOROL became the Station Facility Owner on 20th September 2009.

Basis of Charging

The requirement for the Control Centre service is largely driven by the number of stations and the TTL Charges associated with the Control Centre service represent the proportion of the cost to TTL in providing a Control Centre applicable to the Operators, calculated using the methodology set out under the Total Charge above.

This TTL Charge has been derived from the costs for staff, licences, software and hardware, accommodation, training and recruitment.

It is agreed that the requirement for these services is largely driven by the number of Operator stations and consequently the rate to be applied has been derived on that basis.

Charging Methodology

The total increase in TTL's marginal costs for the Control Centre divided over the number of Operator Stations at the date of the Agreement.

Additional stations added after contract signature and before the Review Date are to be charged at the same unit cost until the Review Date. Reductions in the number of stations will result in a corresponding reduction in the TTL Charge.

Special Terms

All prices are at June 2007 levels. Annual indexation in accordance with the Agreement shall apply.

Review Date

18 months after PAYG Launch Date and then every three years from the preceding Review Date.

Review Process

TTL shall review the resources required to provide the service based on the operating experience in the 18 months prior to the Review Date. The Parties may agree to adjust the resources to reflect any manifest trend showing an increase or decrease in requirements. The costs related to the resources required to support the agreed level of usage shall be apportioned between TTL and the Operators in accordance with the

Charging Methodology detailed above, and the TTL Charge shall be amended accordingly.

3.3 Service Title: TTL Management Services

Total Charge

Total marginal costs for TTL Management Services ██████████ per annum to be apportioned over 247 Operator Stations.

Basis of Charging

The requirement for the TTL Management Services is largely driven by the number of stations and the TTL Charges associated with the TTL Management Services represent the marginal cost to TTL in providing a TTL Management Service capable of supporting the Operators in addition to TTL.

This TTL Charge covers the cost of the additional staff required to provide these services based on average cost for the appropriate grade, inclusive of employers costs and the standard TTL overhead for accommodation/administration.

It is agreed that the requirement for these services is largely driven by the number of Operator Stations and consequently the rate to be applied has been derived on that basis.

Charging Methodology

The total increase in TTL's marginal costs for the Management Services divided over the number of Operator Stations at the date of the PAYG Agreement.

Additional stations added after contract signature and before the Review Date are to be charged at the same unit cost until the Review Date. Reductions in the number of stations will result in a corresponding reduction in the TTL Charge.

Special Terms

All prices are at June 2007 levels. Annual indexation in accordance with the Agreement shall apply.

Review Date

18 months after PAYG Launch Date and then every three years from the preceding Review Date.

Review Process

TTL shall review the resources required to provide the service based on the level of utilisation of the services in the 18 months prior to the Review Date. The Parties may agree to adjust the anticipated level of usage to

reflect any manifest trend showing an increase or decrease in utilisation. In accordance with Appendix 2.3 of this Schedule 4 the Operators shall determine the level of their requirement for the Information Service and TTL shall use all reasonable endeavours to adjust its resourcing to match this requirement.

TTL will provide revised marginal costs for the service based on the number of revised requirements agreed above. For the avoidance of doubt marginal costs shall be deemed to be the additional cost of providing the Management Services to support the Operators over and above those needed to support the TTL Group.

The Marginal Costs related to Management Services shall be apportioned in accordance with the Charging Methodology detailed above, and the TTL Charge shall be amended accordingly.

3.4 Service Title: PAYG Equipment Maintenance

Total Charge

The TTL Charges for the PAYG Equipment Maintenance are as listed in Part B of Appendix 3.

Basis of Charging

The charges for supporting the PAYG Equipment on the Operators stations are built into the PAYG Equipment Maintenance charge. The charges are expressed in terms of Validator Maintenance and Gate Reader Maintenance to reflect the measurable output from this TTL Service.

The charge for this TTL Service is expressed as a per device charge for each Validator or Gate Reader installed on an Operator's Station. The charge for support of all other items of the PAYG Equipment installed on the Operators' Stations is incorporated into the charges for the Validators and Gate Readers.

Charging Methodology

The PAYG Equipment Maintenance charges payable by the Operator are those agreed between the Ticketing Services Provider and TTL (as such were agreed between the Ticketing Services Provider and TTL to cover the support of the Operators' networks, London Overground and DLR.)

Special Terms

For increases or decreases in the number of Operator Stations and/or the devices supported between the date of contract signature and the Review Date (either upwards or downwards) the unit rates stated above will apply.

All prices are at June 2007 levels. Annual indexation in accordance with the PAYG Agreement shall apply.

Rectification works associated with vandalism are not part of the TTL Charges and shall be agreed separately between the Operator and TTL and charged on a time and material basis.

Review Date

August 2010

Review Process

In accordance with the pricing review principles and process set out in Part III of Schedule 4.

3.5 Service Title: Systems Operations Services

Total Charges

Total On-going costs for Systems Operations Services (excluding those relating to retailing activities and Pearl Devices): [REDACTED] per annum to be apportioned over 247 Operator Stations.

Set Up Costs

Base Data Testing Tool
Systems Operations Services

[REDACTED]

Total Set Up Costs

[REDACTED]

To be apportioned over 247 Operator Stations

Basis of Charging

The charges for use of all elements of the PAYG System on the Operators' Stations (excluding those relating to retailing activities and Pearl Devices) are built into the Systems Operations Services charge.

It is agreed that the requirement for these services is largely driven by the number of Operator Stations and consequently the rate to be applied has been derived on that basis.

The Systems Operations Services charges described in this Appendix 3.5 payable by the Operator are those agreed between the Ticketing Services Provider and TTL to cover the support of the Operators' networks, London Overground and DLR. Costs associated with the support of TTL's stations and the Joint Stations are excluded from the TTL Charge and are equivalent to the TTL Charge per station.

The Set Up Costs comprise the non-recurring costs incurred by the Ticketing Services Provider.

Project and commercial management for the set up of the Systems Operations Service (as described in Appendix 2.5) has been absorbed by TTL and not passed on the Operators under the set up charges for this Service.

Charging Methodology

It is agreed that the requirement for these services is largely driven by the number of Operator Stations and consequently the rate to be applied has been derived on that basis.

Special Terms

For increases or decreases in the number of Operator Stations between the date of signature of this Agreement and the Review Date (either upwards or downwards) the unit rates stated above will apply.

All prices are at June 2007 levels. Annual indexation in accordance with the PAYG Agreement shall apply.

Review Date

August 2010

Review Process

In accordance with the pricing review principles and process set out in Part III of Schedule 4 relating to TTL subcontracts.

3.6 Service Title: Wide Area Network Communications

Total Charge

The TTL Charges for the WAN Communications are as listed in Part B.

Basis of Charging

The WAN Communications charge is expressed as an individual set up and ongoing charge for each WAN communications line, incorporating an apportionment of centralised/fixed cost elements over 228 stations (for set up costs) and 247 stations (for ongoing costs).

For station lines, the charge is further split between a direct pass through of the charges contracted by the Ticketing Services Provider with its subcontractor and charges arising from the work of the Ticketing Services Provider. The element of cost which is a direct pass through is subject to a 10% handling charge.

Charging Methodology

The WAN Communications charges payable by the Operator are those agreed between the Ticketing Services Provider and TTL to cover the provision of WAN Communications on the Operators' networks. The sub-contract ("the WAN Communications sub-contract") is the result of a procurement carried out by the Ticketing Services Provider with amendments made by the Operators regarding specification and benchmarking.

Special Terms

For minor changes (either upwards or downwards) in the quantity of devices / stations supported, the unit rates stated above will apply to the extent that is consistent with the WAN Communications sub-contract.

All prices are at June 2007 levels. As at the date of this Agreement, annual indexation does not apply to WAN Communications charges except where indicated in Part B. It is acknowledged that this reflects the position under the WAN Communications sub-contract and is therefore subject to review as part of the pricing review and may be subject to a change as a consequence of such pricing review.

Review Date

The WAN Communications sub-contract has a duration of five years and the Pricing Review will take place on expiry of this term. The five year duration will be deemed to have started at the Communications Installation Mid Point as described in Appendix 3 Part B, or 1 April 2009, whichever is earlier.

Review Process

In accordance with the pricing review principles and process set out in Part III of Schedule 4 relating to TTL subcontracts.

3.7 Service Title: Systems Operations Services (for Operators utilising Pearl Devices)

Total Charges

The TTL Charges for the Systems Operations Services (for Operators utilising Pearl Devices as described in Appendix 2.7) are as listed in Part B of Appendix 3.

Basis of Charging

The TTL Charges for this service are those agreed between the Ticketing Services Provider and TTL. They are quoted on a per-Pearl Device basis for connection via an internet TVM Retail Connection existing as at the date of this Agreement. The same charges would apply to any additional Pearl Devices added by TTL. The charges apply for connection of up to 1000 Pearl Devices (in aggregate taking into account those utilised by TTL (and members of the TTL Group and TTL Third Parties) and the Operators).

Charging Methodology

The same unit cost shall apply to any additional Pearl Devices added by the Operators after signature of this Agreement and prior to the First Price Review date, subject to the 1000 Pearl aggregate limit referred to above. If the limit is hit, then for the avoidance of doubt, TTL agrees that the "Pricing Principles" described in paragraph 1 of Part III of Schedule 4 will apply (mutatis mutandis) in respect of any further procurement required to be undertaken by TTL to accommodate additional Pearl Devices. If an Operator wishes to reduce its quantity of Pearl Devices, TTL will use all reasonable endeavours to maximise the reduction in TTL Charges payable by that Operator.

Special Terms

All prices are at June 2007 levels. Annual indexation in accordance with this Agreement shall apply.

Review Date

August 2010

Review Process

In accordance with the pricing review principles and process set out in Part III of Schedule 4 relating to TTL subcontracts.

PART B

Detail of TTL Charges

Note: -

(1) this section is subject to the Introduction section of Appendix 3;

(2) for Phase 1 Operators, the position may be different from that set out below in respect of set up costs and/or the period prior to PAYG Launch. The detail will be dealt with in the Service Agreement for the relevant Operator;

(3) references in this Table and this Agreement to "set-up" and "ongoing" costs or charges, are references to non-recurring and recurring charges respectively;

(4) "Communications Installation Mid Point" means the completion of the 112th installation of 223 Relevant Installations. For this purpose "Relevant Installations" means 228 Operator Stations plus 5 back offices less the 10 First Great Western Operator Stations which have already been completed

(5) Where the Services Agreement for any individual Operator ("a Piggybacking Operator") indicates that both the "WAN Communications (Cable & Wireless element - back office - dual circuit)" and "WAN Communications (Cable & Wireless element - back office - single circuit)" components are "Not applicable" or "Zero", that means that:-

(a) subject to (b) below, the TTL Services for that Operator do not include the transmission of Magnetic Gate Data between the Operator's Station Computer and an Operator DGC for that Operator (as described in Appendix 2.6 to this Schedule 4), or the provision of a communications line for that purpose ("the MGD Service"). If the Operator requires TTL to provide that MGD Service it will be a Change;

(b) if and for so long as another Operator whose TTL Services includes the MGD Service including the provision of a back office line for that purpose ("the Host Operator") has agreed, the Piggybacking Operator may nominate the Host Operator's Operator DGC as the Piggybacking Operator's DGC for the purpose of Appendix 2.6. In this case, the TTL Services will include the MGD Service on the basis this will comprise the transmission of Magnetic Gate Data between the Piggybacking Operator's Station Computer and the Host Operator's DGC via the central PAYG System.

Item	Unit Price			Total Units	Total Price		Set up charge due date	Ongoing charge commencement date	First Price Review	Notes
	Set up	On-going	Unit		Set up	Ongoing per year				
TTL Control Centre	■	■	per station	247	■	■	N/A	PAYG Launch Date	18 months after PAYG Launch Date	Subject to indexation.
TTL Management services	■	■	per station	247	■	■	N/A	PAYG Launch Date	18 months after PAYG Launch Date	Subject to indexation.

Systems Operations Services (incorporating base data testing tool)	██████	██████	per station	247	██████	██████	3 Periods prior to Anticipate d PAYG Launch Date	PAYG Launch Date	August 2010	Subject to indexation.
PAYG Equipment maintenance (Validators)	████	████	per Validator	879	██████	██████	3 Periods prior to Anticipate d PAYG Launch Date	For each Operator Station, whichever is the later of (i) 3 Periods prior to Anticipated PAYG Launch Date; and (ii) completion of the commissioning of the devices at that Operator Station	August 2010	Once the set up charge due date / ongoing charge commencement date has occurred it will not be revised notwithstanding any subsequent amendment to the Anticipated PAYG Launch Date. Subject to indexation
PAYG Equipment maintenance (Gate Readers)	████	██████	per Gate Reader	1411	████	██████	N/A	For each Operator Station whichever is the later of (i) 3 Periods prior to Anticipated PAYG Launch Date; and (ii) completion of commissioning of the devices at that Operator Station	August 2010	Once the set up charge due date / ongoing charge commencement date has occurred it will not be revised notwithstanding any subsequent amendment to the Anticipated PAYG Launch Date. Subject to indexation
TTL Help Line	████	██████	per PAYG validation on Validator or Gate Reader	Variable	████	██████	N/A	PAYG Launch Date	N/A	Only applies to start and finish of journeys, not mid-journey validations. Annual cap of £250,000 applies from PAYG Launch Date. Cap and individual charge is subject to indexation. For more detail and specific invoicing mechanism refer to Appendix 3 Part A section

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WAN Communications (Cable & Wireless element - stations)	██████	██████	per station circuit	228 (set up element - excludes Phase 1 Operators except FGW) 247 (Ongoing element)	██████	██████	Date line is commissioned by Cable & wireless	From Communications Installation Mid Point.	5 years after Communications Installation Mid Point	Subject to paragraph 5 of Schedule 13 of the PAYG Agreement, the Ongoing charge is at 50% of full rate until PAYG Launch Date. These costs are not subject to indexation.
WAN Communications (Cable & Wireless element - back-office - dual)	██████	██████	per circuit	3	██████	██████	Date line is commissioned by Cable & wireless	From Communications Installation Mid Point.	5 years after Communications Installation Mid Point	Subject to paragraph 5 of Schedule 13 of the PAYG Agreement, the Ongoing charge is at 50% of full rate until PAYG Launch Date. These costs are not subject to indexation.
WAN Communications (Cable & Wireless element - back-office - single)	██████	██████	per circuit	2	██████	██████	Date line is commissioned by Cable & wireless	From Communications Installation Mid Point.	5 years after Communications Installation Mid Point	Subject to paragraph 5 of Schedule 13 of the PAYG Agreement, the Ongoing charge is at 50% of full rate until PAYG Launch Date. These costs are not subject to indexation.

WAN Communications (non - Cable & Wireless element - stations)	■	■	per station circuit	228 (set up element - ie excludes Phase 1 Operators except FGW) 247 (Ongoing element)	■	■	Date line is commissioned by Cable & wireless	From Communications Installation Mid Point.	August 2010	Subject to paragraph 5 of Schedule 13 of the PAYG Agreement, the Ongoing charge is at 50% of full rate until PAYG Launch Date. These costs are subject to indexation.
WAN Communications - Software development costs to enable transfer of magnetic gate data via PAYG system.	■	■	per gated station	74	■	■	May 2009	N/A	N / A	Subject to indexation
Systems Operations Services (for Operators utilising Pearl Devices)	■	■	per Pearl Device	214	■	■	N/A	Upon delivery of the Pearl Device, or such later date as may be agreed by the Parties	August 2010	Subject to indexation

PART C

Abatements

For the avoidance of doubt, no Operator shall be entitled to make any claim for abatements under this Appendix 3, Part C where TTL Charges are not payable by that Operator in relation to the relevant TTL Service. The following provisions shall apply in respect of abatements in respect of TTL Charges: -

TTL Help Line Service Abatement Regime

The TTL Charges in respect of the TTL Help Line shall be subject to abatement in accordance with this following terms:

1. For the purpose of this TTL Help Line Service Abatement Regime, the following expressions shall have the following meanings:-

“Exceptional Day” means any day so notified by TTL to the Operators in the HL Abatement Report, provided that;

- (i) TTL shall not be entitled to notify more than 10 Exceptional Days per year and for this purpose the first year shall commence on the HL Regime Start Date, and subsequent years on each anniversary of that date; and
- (ii) TTL shall only be entitled to notify a day as an Exceptional Day if the Call Abandon Rate exceeds 20% on that day for reasons out of the control of the Help Line facility (including for example, failures of Passenger Transport Services or of the PAYG System)

“HL Abatement Report” means a report to be issued by TTL to all of the Operators in respect of a Period, confirming the Call Abandon Rate and identifying any Exceptional Days for that Period

“HL Regime Start Date” means the first day of the Period which next begins after the expiry of 6 months from the PAYG Launch Date

“Period” means a four weekly invoicing period for the purposes of the Services Agreement (as described in Clause 6.4 of the Services Agreement).

2. Where the Call Abandon Rate in respect of any Period commencing on or after the HL Regime Start Date exceeds 20%, each Operator shall be entitled to an abatement of the TTL Charges paid by it in respect of the TTL Help Line in respect of that Period.
3. The abatement for each Operator in respect of a Period which qualifies for an abatement shall be calculated as follows:-
 - (i) the aggregate abatement across all the Operators shall be an amount equal to 0.1 pence for each relevant Entry Validation and Exit Validation recorded at Operator Stations during the relevant Period. The relevant Entry Validations and Exit Validations are those which trigger TTL Charges, being the validations made by

users at the very start and/or the very end of their journeys respectively. This figure of 0.1 pence shall be subject to indexation on the same basis as the TTL Charges in respect of the TTL Helpline; and

- (ii) each Operator shall be entitled to a proportion of the amount calculated in (i) equivalent to the Operator's proportion of the Maximum TTL Charge for that Period, calculated in accordance with the "Allocation and Invoicing of TTL Charges" section above.
4. For the purpose of calculating the Call Abandon Rate for a Period, all calls on an Exceptional Day within that Period shall be disregarded.
5. TTL will issue the HL Abatement Report by no later than 14 days after the end of the relevant Period.
6. At the end of every sixth Period from the HL Regime Start Date, the amount of the abatement to which the Operator is entitled in respect of that Period and the 5 preceding Periods will be determined and credited by TTL against the invoice issued by TTL to the Operator for TTL Charges in respect of the next following Period.
7. In no circumstances shall the aggregate total amount of abatements due to an Operator in respect of a year (meaning for this purpose the period over which the Maximum TTL Charge is calculated) exceed the amount of TTL Charges payable by that Operator in respect of the TTL Help Line in that year.
8. The Parties have agreed that:-
 - (i) except for the abatements described in this TTL Helpline Abatement Regime, the TTL Charges in respect of the TTL Help Line are payable in full in all circumstances; and
 - (ii) such abatements represent the maximum an Operator is entitled to receive by way of reduction, claim, abatement or set off in respect of the TTL Charges in respect of the TTL Help Line.

For the avoidance of doubt, such abatements only relate to an Operator's claim in relation to any reduction, claim, abatement or set off payment, and shall not limit an Operator's ability to make any other claim which is not in respect of or does not relate to a reduction, claim, abatement or set off in respect of or in relation to the applicable TTL Charges.

9. In addition and without prejudice to the abatements referred to in paragraphs 2 - 8 above:-
 - a) if the Call Abandon Rate (calculated in accordance with paragraph 3 above) for each of 3 consecutive Periods exceeds 20%, then TTL will use all reasonable endeavours to implement a remedial plan which the Parties (acting reasonably) agree for the purposes of providing that the Call Abandon Rate will not exceed 20% in future Periods.
 - b) if there is a legitimate complaint about the TTL Help Line:-

- (i) from one or more of the Department for Transport, the Office of Rail Regulation, London Travelwatch or Passenger Focus (or a successor to any of them);
- (ii) which relates to an aspect of the TTL Help Line other than the Call Abandon Rate or the time within which calls are answered,

(“the Complaint”), then TTL shall use all reasonable endeavours to implement a remedial plan which the Parties (acting reasonably) agree is appropriate to address the Complaint.

Validation Abatement Regime

The TTL Charges in respect of PAYG Equipment Maintenance shall be subject to abatement in accordance with this following terms. For the avoidance of doubt, the following regime covers the provision of the ability to validate and is delivered by a combination of the following services: Appendices 2.2 Control Centre, 2.3 PAYG Systems Operations Services, 2.4 PAYG Equipment Maintenance and 2.6 Wide Area Network Communications. Failures in any one of these services will generally manifest in an inability to validate and ultimately trigger the abatement:

1. For the purpose of this Device Maintenance Abatement Regime, expressions defined in Appendix 2.4 to Schedule 4 shall have the meanings given there and the following expressions shall have the following meanings: -

“Catastrophic Failure” means the Failure at one time of more than 50% of the validator devices, 50% of the Gate Reader devices or 50% of the validation zones in the Total Regime;

“Period” means a four weekly invoicing period for the purposes of the Service Agreement (as described in Clause 6.4 of the Services Agreement);

“Persistent Failure Regime” means the regime described in paragraph 4 below;

“Response Regime” means the regime described in paragraph 3 below;

“RR Abatement Period” means either the first 6 Periods of a Year or the last 7 Reporting Periods in that Year;

“RR Abatement Report” means a report to be issued by TTL to an Operator in respect of an RR Abatement Period, containing a summary by Validation Zone of reported Failures in that period, hours to fix and RR Abatement (where applicable);

“RR Start Date” means the PAYG Launch Date provided that if that date is not the first day of a Period, the RR Start Date will be deemed to be the first day of the next Period following that date.

“RR Year” means a period of 13 Periods commencing on the RR Start Date or any anniversary thereof;

“Total Regime” means an actual or notional regime under which: -

- (a) abatements are made or deemed to be made on a basis equivalent to the terms of this Response Regime, in respect of the provision of equipment maintenance services for Devices at Operators’ Stations and Devices utilised by the London Overground Operator, DLR and TCL and by any operator of stations used by the Heathrow Connect service;
- (b) TTL receives (or is deemed to receive) the abatements which accrue under such regime in respect of the equipment utilised by the London Overground Operator, DLR and TCL and by the operator of stations used by the Heathrow Connect service (except where that person is an Operator);

2. The Operator’s entitlement to abatement in respect of the TTL Charges paid in respect of PAYG Equipment Maintenance may arise under each of the Response Regime and the Persistent Failure Regime.

3. The Response Regime

(a) The Operator shall be entitled to an abatement of the TTL Charges payable by it in respect of PAYG Equipment Maintenance as follows: -

Description of Incident	Amount of abatement per Service Hour from commencement of abatement *	Commencement of abatement
Primary Incident	■	On occurrence of Primary Incident
Secondary Incident	■	16 Service Hours after Secondary Incident occurs

* This amount is to be subject to indexation on the same basis as the TTL Charges in respect of PAYG Equipment Maintenance

(b) For the purposes of calculating such abatements:-

- i) the incident occurs when the Operator reports the Failure in accordance with its obligations under the PAYG Agreement and/or the Services Agreement (which will be deemed to have taken place in cases where the PAYG System has self reported the Failure);

ii) abatements will cease to accrue when validation capability has been restored to the relevant Device(s); and

iii) Service Hours will not be counted in the calculation of how long has passed since the incident commenced if, and from the time that, safe, timely and unhindered access by the Ticketing Services Provider to the Device is denied or advised against. In such a case: -

(1) TTL will procure that the Operator is contacted every 3 Service Hours in the next 24 hours to attempt to agree access to resolve the Failure; and

(2) Service Hours will begin to be counted again for this purpose from zero from the time access has been agreed between the Operator and the Ticketing Services Provider.

(c) The Operator's entitlement to such abatements is subject to and limited by the following: -

i) in no circumstances shall the aggregate amounts of any such abatement in respect of any Validation Zone in any Period exceed the amount payable by the Operator in respect of TTL Charges in respect of PAYG Equipment Maintenance in respect of Devices in that Validation Zone for that Period;

ii) there will be no entitlement to any further abatement in any RR Year if and from the time that the Total Regime Cap is met. The Total Regime Cap is met when the aggregate abatement accrued in respect of the Total Regime for the RR Year exceeds: -

1) 20% of the total maintenance fees payable by TTL to its Ticketing Services Provider for PAYG Equipment Maintenance in respect of all devices in the Total Regime; or

2) if TTL is the Ticketing Services Provider, 20% of its costs of providing such maintenance in respect of all devices in the Total Regime.

iii) no abatement will be payable to an Operator in respect of any Catastrophic Failure. However, where a Catastrophic Failure occurs and results in the Total Regime Cap being met as described in paragraph (c)(ii), the Operator will be entitled to the abatements to which the Operator would have been entitled under this Response Regime in the absence of this paragraph (iii). TTL and each Operator shall co-operate to identify any such amounts.

(d) Accounting for and settling liability for abatements under the Response Regime

i) TTL will issue the RR Abatement Report by no later than 14 days after the end of the relevant RR Abatement Period.

ii) The amount of any abatement due to an Operator in respect of an RR Abatement Period shall be credited by TTL against the invoice issued by TTL to the Operator for TTL Charges for the Period which next follows the end of the RR Abatement Period.

4. Persistent Failure Regime

(a) If an individual Device is subject to a Failure more than 5 times in any RR Year then the Operator is entitled to an abatement of the TTL Charges payable by it in respect of PAYG Equipment Maintenance as follows: -

Persistent Failure Regime Abatement = A - B

Where: -

A is the amount of TTL Charges payable by the Operator for PAYG Equipment Maintenance in respect of the individual Device in that RR Year; and

B is the amount of the abatement to which the Operator is entitled under the Response Regime in respect of that Device in that RR Year.

(b) The Operator shall notify TTL of any claim for entitlement under the Persistent Failure Regime within 30 days of the end of the relevant RR Year. The notice must identify the Device, dates and times of Failures, and amounts to which the Operator considers it is entitled.

(c) The amount of any abatement due to an Operator in respect of the Persistent Failure Regime in a RR Year shall be credited by TTL against the invoice issued by TTL to the Operator for TTL Charges for the Period which next follows the end of the RR Year.

5. The Parties have agreed that:-

(a) except for the abatements described in this Validation Abatement Regime, the TTL Charges in respect of PAYG Equipment Maintenance, Systems Operations Services and WAN Communications are payable in full in all circumstances; and

(b) such abatements represent the maximum an Operator is entitled to receive by way of reduction, claim, abatement or set off in respect of and in relation to the TTL Charges in respect of PAYG Equipment Maintenance, Systems Operations Services and WAN Communications.

For the avoidance of doubt, such abatements only relate to an Operator's claim in relation to any reduction, claim, abatement or set off payment, and shall not limit an Operator's ability to make any other claim which is not in respect of or does not relate to a reduction, claim, abatement or set off in respect of or in relation to the applicable TTL Charges.

Soft Services Abatement Regime

If there is a failure by TTL to provide to an Operator in any Period all or substantially all of:-

(a) the TTL Services described in Appendix 2.2 to Schedule 4 ("the Control Centre Services") then, except where such failure is attributable to a Force Majeure Event, the Operator shall be entitled to withhold payment of the TTL Charges in respect of that Period which would otherwise be payable by it in respect of the Control Centre Services;

(b) a component of the TTL Services described in Appendix 2.3 to Schedule 4 (“the TTL Management Services”) then, except where such failure is attributable to a Force Majeure Event the Operator shall be entitled to withhold payment of the TTL Charges which would otherwise be payable by it in respect of that component and that Period. For this purpose, the components of the TTL Management Services and the proportion of the TTL Charges payable in respect of the TTL Management Services attributable to each component shall be as follows:

Component	Proportion
Performance and Operations Services	20%
Accounting and Revenue Settlement Services	20%
Information Services	20%
Fares Administration Services	20%
Change and Commercial Management Services	20%

SCHEDULE 5

PAYG Operating Requirements

Each operator of Passenger Transport Services accepting PAYG on its network shall comply with the following requirements:

1. PAYG Operations Code of Practice (OCOP)

Compliance with any Mandatory Requirements contained in OCOP.

2. Staff Training

Staff training sufficient that:

2.1 all staff with a need to carry out any Mandatory Requirements identified as such in OCOP are aware of their responsibilities and how to fulfil them;

2.2 those staff whose primary role involves a customer interface are able to provide a reasonable level of assistance to customers on the correct operation of PAYG, the fares charged and the rules surrounding the use of PAYG; and

2.3 all revenue protection staff are trained in the revenue protection policies and procedures applicable to the use of PAYG to an extent necessary to be reasonably able to apply such policies and procedures.

3. TTL Smartmedia readers

Provision of sufficient TTL Smartmedia readers at all stations where PAYG is valid to enable staff whose primary role involves a customer interface to assist customers with product and balance enquiries and to carry out revenue protection activities.

4. Signage, Promotional Material and Public Announcements

Provision of sufficient signage, promotional material and public announcements to ensure that all customers of an operator of Passenger Transport Services should reasonably know how to validate at the stations controlled by that operator and be aware of any restrictions relating to the use of PAYG at the stations controlled by that operator, and the need for users of PAYG to "touch-in and touch-out" to obtain "good value" PAYG fares.

5. PAYG Equipment

To have in place the level of PAYG Equipment agreed with TTL as being sufficient to accept PAYG on its network, which shall be comparable to that agreed by TTL with operators with a similar network, passenger volumes and number and type of stations.

All PAYG Equipment shall have passed the appropriate acceptance testing to prove that it is installed and functioning correctly.

Where TTL has entered into an Implementation Agreement with an Operator then save as otherwise agreed between those Parties, the PAYG Equipment to

be installed under that agreement, together with any pre-existing PAYG Equipment at any Operator Stations at the date of this Agreement, shall be regarded as sufficient for this purpose as at the date of this Agreement.

6. Gateline Management Processes

(a) Train service disruption

Arrangements must be made for the Control Centre ("CC") to be informed as soon as possible when such disruption occurs so gate settings can be adjusted to cause minimum impact to customers. Resumption to normal operation must also be communicated to the CC.

(b) Station emergencies

Staff must only use the gateline emergency opening function (which causes passengers to be unable to validate PAYG journeys) where this is unavoidable for safety reasons. The CC must be informed if this function is used, and when normal operation is resumed.

(c) Customers experiencing problems with TTL Smartmedia validations

If a check of TTL Smartmedia with a TTL Smartmedia reader fails to identify the problem preventing its use, staff must direct customers to contact the TTL Help Line.

7. Maintenance Support

7.1 An Operator must report any planned or unplanned train service disruption or station closures at its Operator Station(s) promptly to the CC, and update the CC as the situation develops or is resolved, including details of how customers are being advised/handled.

7.2 Where an Operator needs to request maintenance support, including for the avoidance of doubt maintenance support for damage and/or vandalism to any PAYG Equipment, the Operator must call the maintenance helpdesk details of which will be provided by TTL to ATOC from time to time.

7.3 Where an Operator becomes aware that passengers are unable to validate their TTL Smartmedia at its Operator Station(s) or part of an Operator Station, the Operator must report this to the CC promptly. For the avoidance of doubt, Operators must also report such issues to the CC even where Operators have requested maintenance support under paragraph 7.2 in order to resolve issues with TTL Smartmedia validation.

SCHEDULE 6

Operator Deed of Adherence

THIS DEED POLL is made on []

BY [] of [] (the *Covenantor*)

WHEREAS:

- (A) On [] the persons in the schedule hereto entered into an agreement implementing arrangements for the acceptance by Operators of PAYG (such agreement, as amended and novated, the *PAYG Agreement*).
- (B) The Covenantor wishes to become an Operator for the purposes of the PAYG Agreement and to be bound by the terms of the Agreement which are capable of applying to an Operator with effect from [].

NOW THIS DEED WITNESSES as follows:

1. Interpretation

Words and expressions defined in the PAYG Agreement shall, unless the context otherwise requires, have the same meanings when used in this Deed.

2. Adherence

The Covenantor hereby: -

- 2.1 warrants that it is a member of the Scheme; and
- 2.2 confirms that it has been supplied with a copy of the PAYG Agreement and with effect from [] covenants to and undertakes with each of the persons in the schedule to this Deed and with each such other person who may from time to time expressly adhere to the PAYG Agreement (by way of execution of a deed or by way of novation) to be bound by and comply with the terms of the PAYG Agreement which are capable of applying to an Operator.

3. ATOC Representative

The Covenantor hereby appoints ATOC as its agent for as long as the Covenantor is a party to the PAYG Agreement for the purpose of performing all functions which ATOC is to perform on behalf of the Operators in accordance with the PAYG Agreement.

4. Notices

For the purpose of the PAYG Agreement, the Covenantor's address for notices shall be as follows:

Address:

Fax No:
Addressed for the personal attention of:

5. **Governing Law**

This Deed shall be governed by and construed in accordance with English law.

IN WITNESS WHEREOF this Deed has been duly executed the day and year first above written.

EXECUTED as a DEED)
and DELIVERED by)
[])
acting by two Directors/)
a Director and the Secretary)

SCHEDULE 7

PAYG Revenue Allocation

PART 1 - PRINCIPLES

A1. London Overground Operator

A1.1 For the purposes of this Schedule 7 and for so long as settlement of revenues allocated to any London Overground Operator is to be made by TTL through RSP as provided in Clause 10.2, the services operated by that London Overground Operator shall be treated as if they were Operators' Services and references in this Schedule 7 only to "Operators" shall be treated as including that London Overground Operator.

A1.2 TTL undertakes that it shall not cease the arrangement for settlement of PAYG revenues allocated to any London Overground Operator through RSP as provided in Clause 10.2 during the term of the PAYG Agreement without having first agreed with the Operators amendments to Clause 10 and this Schedule 7 which properly and fairly take account of the London Overground Operator ceasing to be part of the aggregate settlement of net PAYG revenues.

A1.3 Without prejudice to the provisions of Clause 11 and Schedule 8 dealing with Commissions payable by and to any London Overground Operator, nothing in this Schedule 7 is intended to or shall constitute the London Overground Operator as an Operator for any purposes of this Agreement other than this Schedule 7.

A2. Relationship with Schedule 16

A2.1 It is acknowledged that paragraphs 1.2 and 1.3 of Part 2 of this Schedule 7 are subject to substitution by revised provisions as set out in Schedule 16 with effect from the date as provided in Schedule 16.

A3. Overview

A3.1 In respect of any period beginning on or after the PAYG Launch Date, the procedures for allocation of PAYG Value Expended by passengers to Operators shall be in accordance with the procedures set out in this Schedule 7 and the results of this allocation shall be used to calculate the sums due in respect of any relevant period under the Amended Clearance Agreement.

A3.2 The procedures for allocation of PAYG Value Expended will make use of apportionment matrices to be prepared by the parties prior to the PAYG Launch Date and subsequently kept under review in accordance with Part 2, paragraph 2.

PART 2 - ALLOCATION

1. Allocation of PAYG Revenue

1.1 The allocation of PAYG Value Expended by passengers to Operators in respect of any relevant period shall be the aggregate of:

- (a) in respect of PAYG Only Journeys which are also Complete Journeys up to but excluding the Schedule 16 Commencement Date, the Operator Allocation calculated in accordance with Part 2, paragraph 1.2;
- (b) in respect of PAYG Mixed Journeys which are also Complete Journeys up to but excluding the Schedule 16 Commencement Date, the Operator Allocation calculated in accordance with Part 2, paragraph 1.3, subject to any amended approaches agreed in accordance with Part 2, paragraph 1.4;
- (c) in respect of all Complete Journeys on or after the Schedule 16 Commencement Date, the aggregate of the Operator Allocation calculated in accordance with:
 - (i) in respect of Complete Journeys which are Uncapped Rail Journeys and which are:
 - (aa) PAYG Only Journeys, paragraph 6(i) of Schedule 16; and
 - (bb) PAYG Mixed Journeys, paragraph 6(ii) of Schedule 16;
 - (ii) in respect of Complete Journeys which are Capped Rail Journeys, paragraph 7 of Schedule 16subject to annual review in accordance with Part 2 of Schedule 16;
- (d) in respect of Incomplete Journeys, the allocation in accordance with Part 2, paragraph 1.5, subject to reviews agreed in accordance with Part 2, paragraph 1.6;
- (e) in respect of PAYG Adjustments, Void Entries and Void Exits, the allocation in accordance with Part 2, paragraph 1.7; and
- (f) in respect of PAYG Assumptions, Reconstructions and Late Data, the allocations in accordance with Part 2, paragraph 3.3.

1.2 PAYG Only Journeys which are also Complete Journeys

For the avoidance of doubt, this category of journey includes Here-to-Here Journeys, Same Station Exit Journeys and Auto-completed Journeys.

The allocation to the Operators of PAYG Value Expended in respect of a PAYG Only Journey with an Entry Validation at station O and an Exit Validation at station D travelling via Route R made on Traffic Day T shall be determined in accordance with the following provisions:

$$\text{Operator Allocation} = \text{PAYG Uncapped Fare} \times M_{\text{ODR}} \times D_{\text{T}}$$

where:

PAYG Uncapped Fare has the meaning given in Schedule 1;

M_{ODR} is the percentage allocation used to calculate the revenue due to the Operators as set out in the PAYG Only Apportionment Matrix for a journey with an Entry Validation at station O, an Exit Validation at station D and travelling via Route R;

D_{T} is the Daily Discount Factor, defined as X_{T} divided by Y_{T} where:

X_{T} is the sum of the PAYG Value Expended for all Rail Journeys which are Complete Journeys undertaken on Traffic Day T and for these purposes the calculation of PAYG Value Expended (i) is after taking account of the effects of any capping set out in Schedule 3 Part 2 Table 6; and (ii) includes negative values; and

Y_{T} is the sum of the PAYG Uncapped Fares for all Rail Journeys which are Complete Journeys undertaken on Traffic Day T.

1.3 PAYG Mixed Journeys

For the avoidance of doubt, this category of journey includes Auto-completed Journeys.

The allocation to the Operators of PAYG Value Expended in respect of a PAYG Mixed Journey with an Entry Validation at station O and an Exit Validation at station D travelling via Route R made on Traffic Day T shall be determined in accordance with the following provisions:

$$\text{Operator Allocation} = \text{PAYG Uncapped Fare} \times M'_{\text{ODR}} \times D_{\text{T}}$$

where:

PAYG Uncapped Fare has the meaning given in Schedule 1;

M'_{ODR} is the percentage allocation used to calculate the revenue due to the Operators as set out in the PAYG Mixed Apportionment Matrix for a journey with an Entry Validation at station O, an Exit Validation at station D and travelling via Route R;

D_{T} is the Daily Discount Factor calculated in accordance with paragraph 1.2.

- 1.4 The Parties agree to investigate within 9 months of the PAYG Launch Date the case for refining the approach to apportioning the revenue from PAYG Mixed Journeys to reflect more closely the usage of the PAYG element of the journey. The consideration of any solution will have due regard to the benefits in terms of increased accuracy of allocation set against the costs involved. If the Parties, acting reasonably, agree that any such change is necessary this will be implemented within 18 months of the PAYG Launch

Date. The Parties may agree subsequent reviews of the approach to apportioning revenue from PAYG Mixed Journeys.

1.5 Incomplete Journeys

The PAYG Value Expended in respect of Incomplete Journeys (being the relevant Entry Charge or Exit Charge) will be allocated in accordance with the following provisions:

- (a) Where an Extension Permit is present the PAYG Value Expended (being a Mixed Travel Entry Charge or a Mixed Travel Exit Charge) will be allocated to the Operators. See also paragraph 6.
- (b) In all other cases the percentage share of the PAYG Value Expended (including a Mixed Travel Entry Charge or a Mixed Travel Exit Charge where an Extension Permit is not present) will be allocated in accordance with the percentages shown in Schedule 3 Part 2 Table 14.

1.6 The Parties will conduct a review of the level and proportions of revenue from Incomplete Journeys before and after the extension of PAYG to Operators' Services, to assess whether any change in the rules for allocating such revenue is justified. This will include an assessment of the impact on the revenue from Incomplete Journeys accruing to TTL and whether any change in the level of such revenue can be attributed to the extension of PAYG to Operators' Services. The Parties will commence the review one year from the PAYG Launch Date and will complete it and apply any consequential changes to allocations no more than 18 months from the PAYG Launch Date.

1.7 PAYG Adjustments

The PAYG Value Expended in respect of PAYG Adjustments, Void Entries or Void Exits made by Operator staff or at London Overground Stations will be allocated in accordance with the percentages shown in Schedule 3 Part 2 Table 14. The PAYG Value Expended in respect of PAYG Adjustments, Void Entries or Void Exits made by TTL station staff, TTL help desk staff or at any other stations (in accordance with Schedule 2 Part 2 m 9) shall be allocated wholly to (or where appropriate borne by) TTL. See also paragraph 6.

1.8 Bus Resolution

The Parties acknowledge that where bus validators are set to auto-complete Rail Journeys at times of service disruption (pursuant to Schedule 2 Part 3 c or otherwise), the Entry Validation and Entry Charge are cancelled and the revenue relating to the Rail Journey shall be zero and there shall be no allocation of PAYG revenue to the Operators.

1.9 Exit Tokens

For the avoidance of doubt, Exit Tokens are non-revenue transactions.

2. PAYG Apportionment Matrices

- 2.1 Prior to the Anticipated PAYG Launch Date the Parties will in accordance with the remaining principles of this Part 2, paragraph 2 produce:
- (a) the PAYG Only Apportionment Matrix, which shall constitute Annex 1 to this Schedule 7; and
 - (b) the PAYG Mixed Apportionment Matrix which shall constitute Annex 2 to this Schedule 7.

The Parties acknowledge that these matrices:-

- (i) will be too large to print and physically attach to this Agreement. Following agreement of the matrices, TTL will transmit the relevant files (identified as such) electronically to RSP and if requested by either TTL or ATOC, TTL and ATOC will each initial and each will retain a read-only CD containing the agreed form of the matrices; and
 - (ii) will need to be updated in response to significant timetable and network changes, to correct errors or omissions in a timely manner, etc., and the Parties will, acting reasonably, agree a process by which such changes are determined and input to the PAYG System and, if appropriate, payments corrected since the time of notification of the problem.
- 2.2 Each matrix will contain at least one entry for each and every combination of origin and destination station, without regard to which party controls the station ("*Station Pair*"). Each entry shall be the percentage share due to the Operators in respect of each Station Pair and Route concerned. Part 2, paragraphs 2.3 to 2.14 below describe the procedures by which the PAYG Only Apportionment Matrix will be determined, and Part 2, paragraphs 2.15 to 2.17 below describe the procedures by which the PAYG Mixed Apportionment Matrix will be determined.
- 2.3 For each Station Pair the Parties shall agree those Routes which will be recognised for the purposes of the PAYG Only Apportionment Matrix, subject to the total number of Station Pair and Route combinations not exceeding 4 million. Within this constraint, and unless otherwise agreed between the Parties, there will be up to eight Routes for each Station Pair, subject to any such Route having a length no more than 50% plus 2 kilometres longer than that of the shortest route by distance. The Parties acknowledge that the aim will be to recognise any Route between a Station Pair with revenue of £100 or more per annum, and TfL undertakes that the PAYG System will be capable of accommodating more than eight Routes to meet this aspiration.
- 2.4 Routes will be designated as R = 0, 1, 2, etc. and shall be defined by the Intermediate Validation Routeing Record as determined in accordance with Part 2, paragraph 2.5 for the Station Pair concerned. Route R = 0 will always be provided for every Station Pair. Unless otherwise agreed between the Parties, Route R = 0 shall be defined as the Route which it is expected the most passengers would use to make a Complete Journey between the two stations, based on the lowest Generalised Journey Time of the Primary Sub-route of that Route as defined in accordance with Part 2, paragraph 2.9.

- 2.5 In relation to a Rail Journey the Intermediate Validation Routeing Record associated with a particular Route shall indicate, in chronological order, the stations at which any Intermediate Validations have occurred, up to a maximum of four Intermediate Validations. Any Intermediate Validations beyond the first four shall be ignored.
- 2.6 Subject to the provisions set out in Part 2 paragraph 2.3 above and taking account of Part 2, paragraph 2.13, for each Station Pair the Parties shall agree further Routes (R = 1, 2, etc.), as defined by alternative Intermediate Validation Routeing Records with successively increasing Generalised Journey Times.
- 2.7 For the purposes of revenue apportionment, and unless otherwise agreed between the Parties, a passenger will be assumed to have travelled between the two stations of a Station Pair by the Route as determined by the Intermediate Validation Routeing Record for the Rail Journey concerned. If a Route cannot be determined because the Intermediate Validation Routeing Record does not match any of the specified Routes for the Station Pair concerned, then the passenger will be deemed to have travelled by Route R = 0.
- 2.8 The Parties acknowledge that an improvement over the “exact matching” envisaged in Part 2, paragraph 2.7 above may be achieved by more complex logic involving consideration of the validations that define each Route and the validations recorded for a particular journey, and defining the Route based on partial matching of the validations where there is no exact match. In particular such an approach will aim to address situations where there are additional validations in the intermediate Validation Routeing Record that are not included in the defined Routes and where either the OSI Exit Validation or OSI Entry Validation is missing (See Schedule 2 Part 2n 3)). TTL agrees to consult with the Operators, including a review of the Routes defined for each Station Pair, and to implement an approach based on partial matching no later than 12 months after the PAYG Launch Date.
- 2.9 In relation to a Station Pair and Route (except for those Station Pairs where the destination station is the same as the origin station), the factor (M_{ODR}) shall be calculated in accordance with the following formula:

$$M_{ODR} = N_{ODR} / (N_{ODR} + T_{ODR})$$

where

M_{ODR} means the factor used to calculate the allocation of revenue to the Operators and to be recorded in the PAYG Only Apportionment Matrix as such for origin station O, destination station D and Route;

N_{ODR} is the distance in kilometres travelled on Operators’ Services in travelling from origin station O to destination station D via Route R;

T_{ODR} is the distance in kilometres travelled on TTL Rail services in travelling from origin station O to destination station D via Route R;

and for this purpose the distance travelled on TTL Rail Services and the distance travelled on Operators' Services shall be based on the route (the "**Primary Sub-route**") which involves the lowest Generalised Journey Time, and where – for each section of the journey exclusively on TTL Rail services and/or exclusively on Operators' Services – the shortest route by distance consistent with the Intermediate Validations is assumed.

2.10 In relation to each Station Pair, further routes shall be identified, if such exist, which a passenger might reasonably use (an "**Alternative Sub-route**") in accordance with the following process. The route which involves the next lowest Generalised Journey Time after the Primary Sub-route or a previously identified Alternative Sub-Route shall be an Alternative Sub-route if, and only if, the following three conditions are met:

- (a) M_{ODR} calculated for such route in accordance with the provisions of Part 2, paragraph 2.9 above is not equal to M_{ODR} for the Primary Sub-route (and not equal to M_{ODR} for any Alternative Sub-routes previously identified under the provisions of Part 2, paragraph 2.12);
- (b) T_{ODR} plus N_{ODR} for such route is less than 50% plus 2 kilometres more than the sum of T_{ODR} plus N_{ODR} for the shortest route by distance; and
- (c) the Generalised Journey Time for such route is less than 20% plus 15 minutes more than the Generalised Journey Time for the Primary Sub-route.

2.11 If these conditions are not met then there are no Alternative Sub-routes associated with the Route concerned. In this case the factor used to calculate the allocation of revenue to the Operators and recorded in the PAYG Only Apportionment Matrix as such for origin station O, destination station D and Route R is M_{ODR} as calculated in Part 2, paragraph 2.9.

2.12 If an Alternative Sub-route is identified then the process set out in Part 2, paragraph 2.10 is repeated to identify a maximum of three Alternative Sub-routes. In this case the factor used to calculate the allocation of revenue to the Operators and to be recorded in the PAYG Only Apportionment Matrix as such for origin station O, destination station D and Route R is (M_{ODR}) calculated as follows:

$$M_{ODR} = \sum_{s=1}^n M_{ODRs} \cdot \frac{\exp(-IT_s)}{\sum_{t=1}^n \exp(-IT_t)}$$

where;

M_{ODR} means the factor used to calculate the allocation of revenue to the Operators and to be recorded in the PAYG Only Apportionment Matrix as such for origin station O, destination station D and Route R;

Σ means the summation of the calculation in respect of each Primary Sub-route and each Alternative Sub-route for the route concerned;

M_{ODRS} is the value of M_{ODR} calculated in accordance with the provisions of Part 2, paragraph 2.9 above for the Primary Sub-route and each Alternative Sub-route identified;

exp means exponential;

s,t represent the Primary Sub-route or each Alternative Sub-route for the Route concerned identified in accordance with Part 2, paragraphs 2.9 to 2.11;

n is the total number of Primary Sub-route plus Alternative Sub-routes (n=2, 3 or 4) identified for the Route concerned;

$T_s T_t$ is the Generalised Journey Time associated with a journey from Origin O to Destination D via Route R and Sub-route s or t as applicable; and

λ is a constant derived from the mean Generalised Journey Time for the Primary Sub-route and Alternative Sub-routes in accordance with the following table:

$\Sigma T_i/n$	λ
Less than 5 mins	0.30
5 mins to 9.99 mins	0.21
10 mins to 19.99 mins	0.15
20 mins to 29.99 mins	0.12
greater than 30 mins	0.10

The above values of (lambda) are provisional and may be revised (both before and after the PAYG Launch Date, but with revisions not applying retrospectively) having regard to the results of calibration with Travelcard Diary Survey data and any other information so as to take account of improved information on Generalised Journey Time for the relevant routes, subject to agreement by the Parties. Any failure to reach agreement on any revisions under this paragraph shall be subject to resolution in accordance with Clause 22.

2.13 In agreeing the Routes to be recognised for each Station Pair in accordance with Part 2, paragraph 2.6 it shall be the objective of the Parties to define individual Routes to incorporate those routes which have the greatest number of Rail Journeys between the two stations constituting each Station Pair, and/or to reflect differences in the percentage due to the Operators where this varies significantly by route, and/or to assist the Operators in determining which Operator(s) services have been used for a journey.

2.13A For each Station Pair where the destination station is the same as the origin station, the percentage share due to the Operators will be in accordance with the percentages shown in Schedule 3 Part 2 Table 14.

2.14 The Parties acknowledge that the objective of the apportionment system is to allocate PAYG revenue in respect of any given Station Pair on the basis of services used by PAYG passengers as measured by passenger kilometres travelled. It is also acknowledged that from the PAYG Launch

Date it may not be possible fully to meet the aspirations of both Parties in this area. The Parties agree to work together to develop the system to meet their aspirations, having due regard to the costs and benefits involved.

- 2.15 The percentage revenue due to the Operators and recorded in the PAYG Mixed Apportionment Matrix for a given Origin, Destination and Route (M'_{ODR}) shall be calculated as follows where, for a given Route, there are no Alternative Sub-routes and the provisions of paragraph 2.9 define M_{ODR} (as recorded in the PAYG Only Apportionment Matrix):

$$M'_{ODR} = \sum_z \frac{N_{ODRz}}{(N_{ODRz} + T_{ODRz})} \cdot \frac{S_{ODz}}{S_{OD}}$$

where

Σ means the summation of the calculation in respect of each zonal combination;

z represents each zonal combination of Travelcard available

N_{ODRz} is the distance travelled on Operators' Services in travelling from Origin O to Destination D via Route R but excluding any distance within zones z ;

T_{ODRz} is the distance travelled on TTL Rail services in travelling from Origin O to Destination D via Route R but excluding any distance within zones z ;

S_{ODz} is the number of PAYG Mixed Journeys made between the zone of Origin O and the zone of Destination D by holders of Travelcards valid for zonal combination z over a given period (the "**Reference Period**") established in accordance with Part 2, paragraph 2.16;

S_{OD} is the number of PAYG Mixed Journeys made between the zone of Origin O and the zone of Destination D by holders of all Travelcards over the Reference Period.

- 2.16 The dates of the Reference Period will be agreed between the Parties, with a view to ensuring the results are as representative of the period for which they are to be used as possible. The Parties acknowledge that, in accordance with Part 2, paragraph 2.1 (b), the PAYG Mixed Apportionment Matrix will need to be updated periodically using a revised Reference Period. If a Party has reasonable grounds to believe that the results are unduly unrepresentative of the period to which they apply, the Parties will negotiate in good faith to agree appropriate adjustments (if any) to the affected payments.

- 2.17 The percentage revenue due to the Operators and recorded in the PAYG Mixed Apportionment Matrix for a given Origin, Destination and Route (M'_{ODR}) shall be calculated as follows where, for a given Route, there are one or more Alternative Sub-routes and the provisions of Part 2, paragraph 2.12 define M_{ODR} (as recorded in the PAYG Only Apportionment Matrix):

$$M'_{ODR} = \sum_{s=1}^n M'_{ODRs} \frac{\exp(-IT_s)}{\sum_{t=1}^n \exp(-IT_t)}$$

where

M'_{ODRs} is the value of M'_{ODR} calculated in accordance with the provisions of Part 2, paragraph 2.15 above for the Primary Sub-route and each Alternative Sub-route identified;

and exp, s, t, n, Σ , T_s , T_t and λ are as defined within Part 2, paragraph 2.12.

- 2.18 If either Party considers that the value of M_{ODR} or M'_{ODR} for any Station Pair and Route, determined accordance with the provisions of this Schedule 7, are not a *bona fide* best estimate of the percentage of the total distance which is travelled on Operators' Services for users making journeys from origin station O to destination station D via Route R then the Parties will negotiate in good faith to agree such estimate, and each Party shall adduce such evidence as it sees fit to support its claim.
- 2.19 For any particular Station Pair and Route, the Parties may agree on a percentage share as being due to the Operators other than that calculated in accordance with the foregoing provisions of this Part 2, paragraph 2, and in this event such share shall be recorded in the PAYG Only Apportionment Matrix or the PAYG Mixed Apportionment Matrix, as appropriate.
- 2.20 For the avoidance of doubt, unless otherwise agreed between the Parties in accordance with Part 2, paragraphs 2.18 and 2.19, then the values of M_{ODR} and M'_{ODR} shall be calculated in accordance with the other provisions of this Schedule 7.
- 2.21 The Parties undertake to keep each other informed of any changes in the parameters used to calculate Generalised Journey Times. If a Party believes these are in conflict with the principles governing the determination of Generalised Journey time as set out in Schedule 1 and there is a failure to agree on how the matter should be resolved, then any Party may refer that matter for resolution in accordance with Clause 22.

3. Other Items

Redemption of PAYG Balances

- 3.1 Refunds resulting from the redemption in whole or in part of a PAYG Balance by passengers shall be solely at the cost of TTL.

PAYG Assumptions, Reconstructions and Late Data

- 3.2 Where the PAYG System identifies that there is missing transaction information in the PAYG System (by virtue of the fact that the PAYG Balance as recorded on an item of TTL Smartmedia is not consistent with the value held within the PAYG System) and the data cannot be captured

through a PAYG Reconstruction then an adjustment will be made to increase the total amount of PAYG Value Expended or PAYG Value Added, as appropriate, based on the unexplained change in the PAYG Balance recorded on the item of TTL Smartmedia concerned.

- 3.3 The aggregate amount of such adjustments in respect of a Settlement Period (after the cancellation of any such adjustments in respect of journeys which are subsequently processed by the PAYG System as PAYG Late Transactions) shall be known as the "*PAYG Assumptions*" and shall be allocated between TTL and the Operators pro-rata to the amounts of PAYG Value Expended allocated to TTL (including, for the avoidance of doubt, amounts in respect of Bus Journeys) and the Operators respectively.
- 3.4 Subject to Part 2, paragraph 3.5 the percentage of the total PAYG Assumptions in each Settlement Period to be allocated to the Operators, will be based on the principle set out in Part 2, paragraph 3.3. TTL shall calculate and agree with the Operators a percentage based on the three most recent Settlement Periods. Such percentage shall be updated at each Fares Revision Date or as otherwise agreed between the Parties, without retrospective application to prior Settlement Periods. The initial percentage to be applied from the PAYG Launch Date shall be 3%.
- 3.5 The Parties acknowledge that the value of the PAYG Assumptions is expected to be less than 0.1% of aggregate PAYG Value Expended. Should the value of the PAYG Assumptions exceed this figure in any Settlement Period, the Parties will negotiate in good faith to identify the source of any missing data, and to agree an allocation of the PAYG Assumptions such that each Party's revenue from PAYG is as it would have been had the data not been missing. In these circumstances the allocation of PAYG Assumptions between the Parties in respect of prior Settlement Periods shall be subject to retrospective adjustment following agreement of the allocations in accordance with this paragraph. Where the value of the PAYG Assumptions exceed this figure in any Settlement Period, TTL also undertake to inform the Operators of the principal reasons for this, what needs doing to address these problems in the future and to use their reasonable endeavours to address these problems.

Payments arising from Operator Train Service Disruption

- 3.6 Where, in accordance with the provisions of Schedule 2 Part 2 m (10), refunds are given to customers the cost of which are to be borne by the Operator concerned, these shall be processed as PAYG Value Added transactions and the relevant Operator shall pay the relevant sum to TTL.

Reviews concerning revenue allocation of certain Category 3 Fares

- 3.7 TTL acknowledges that all the revenue arising from Category 3 fares charged to children under 11 (see Schedule 3 Part 2 Table 8) is due to the Operators, but that application of the remaining provisions of this Schedule 7 will result in some of the revenue for such journeys being allocated to TTL. TTL undertakes to carry out a review with the Operators, based on the first 12 months of operation following the PAYG Launch Date, to determine the extent to which such revenue is being allocated to TTL rather than the Operators. The Parties will then, acting reasonably, agree

a way forward relating to both the first 12 months of operation and subsequently.

3.8 TTL acknowledges that where Category 3 fares are charged in accordance with Schedule 2 Part 2 c(ii) the Operators are entitled to receive the "Minimum Amount", defined as:

(a) in respect of any period prior to the Schedule 16 Commencement Date, the Category 1 fare for that part of each Rail Journey on Operators' Services (where the parts of the journey on Operator and TTL services are determined in accordance with Part 2 of this Schedule 7) multiplied by the Daily Discount Factor; or

(b) in respect of any period with effect from the Schedule 16 Commencement Date), the Category 1 fare for that part of each PAYG Uncapped Journey on Operators' Services.

TTL further acknowledges that application of the remaining provisions of this Schedule 7 may result in the allocation to the Operators for such journeys, being less than the Minimum Amount. TTL undertakes to carry out a review, with the Operators, based on the first 12 months of operation following the PAYG Launch date, to determine the extent to which the revenue allocated to the Operators for such journeys falls short of the Minimum Amount. The Parties will then, acting reasonably, agree a way forward relating to both the first 12 months of operation and subsequently.

4. Data Provision

4.1 TTL will supply data on PAYG Journeys in accordance with the provisions of the Amended Clearance Agreement.

5. Not used

6. Limitations of PAYG System

6.1 The Parties acknowledge that due to limitations of the PAYG System that will exist at the Anticipated PAYG Launch Date:

(a) the PAYG Value Expended associated with a Mixed Travel Entry Charge or a Mixed Travel Exit Charge where an Extension Permit is present (see Part 2, paragraph 1.5); and

(b) the value of PAYG Adjustments, Void Entries and Void Exits (see Part 2, paragraph 1.7)

will be allocated to the Operators in accordance with the percentages as set out in Schedule 3 Part 2 Table 14, and reported to the RSP as such.

6.2 The Parties acknowledge that in consequence at certain stations the allocations will not be in accordance with the provisions of Part 2, paragraphs 1.5 and 1.7, as appropriate.

6.3 TTL undertakes no less than once every four Settlement Periods to identify the revenues at the stations concerned (which are affected by allocations

not being in accordance with the provisions of Part 2, paragraphs 1.5 and 1.7) and to make a payment to the Operators of the difference between the values due under Part 2, paragraphs 1.5, 1.6 or 1.7 and the values actually allocated in accordance with Part 2, paragraph 6.1 (a) or 6.1 (b) with reference to Schedule 3 Part 2 Table 14.

- 6.4 TTL further undertakes to investigate within 9 months of the PAYG Launch Date the costs of removing these limitations in the PAYG System, including the consequential changes necessary to the data to be supplied under the provisions of Part 2, paragraph 4.1 above. The adoption of any solution will have due regard to the benefits in terms of increased accuracy of allocation set against the costs involved, and if any such change is agreed by TTL, acting reasonably, this will be implemented within 18 months of the PAYG Launch Date.

SCHEDULE 8

Retailing

1. As set out under Clause 12 of this Agreement, the Operators may retail TTL Smartmedia, and all agreed fare products that these media are capable of containing, at Operator Stations, via the internet or via telephone sales. Additional terms relating to retailing by the Operators are as set out below but as a minimum, wherever the Operator retails PAYG Value Added, it will also retail Extension Permits.
2. Each Operator shall determine at which of their Operator Stations and other locations they wish to commence retailing of TTL Smartmedia or agreed PAYG products and the technical solutions they wish to use, subject to and for so long as such technical solutions are compatible with the PAYG System.
3. For the avoidance of doubt (and without prejudice to the terms of any existing arrangements between TTL and any Operator in respect of retailing as described in Appendix 1 to Schedule 3), the Operators shall be under no obligation to provide any retail facility at any or all of their Operator Stations and any decision to retail at a location shall rest solely with the Operator.
4. Without prejudice to the terms of any existing arrangements between TTL and any Operator in respect of retailing, each Operator shall determine the sales channels appropriate to their network and the location at which retailing is to occur. It is agreed that the available channels shall include but not be limited to:
 - Sales at a station booking office;
 - Sales via a Ticket Vending Machine; and/or
 - Internet sales via a website.

Each Operator shall determine when they shall commence or cease the provision of retail facilities at a given location but shall give reasonable notice to TTL of its intention to do so.

When an Operator notifies TTL of its intention to commence retailing TTL shall acknowledge that notice and the list of locations in Appendix 1 to Schedule 3 shall be amended accordingly. For the avoidance of doubt, such acknowledgement shall not impose any additional terms and conditions on such retailing not contemplated by this Agreement.

5. Where, in accordance with Clause 12 (and subject to Clause 11.2) of this Agreement, an Operator provides a PAYG retail service TTL shall pay that Operator Commission at the following rate in respect of the PAYG Value Added thereby: -

- 5.1 0.5% in respect of all PAYG sales transactions downloaded through the Operator's gates or passenger validators including but not limited to ad hoc loads, fast loads and auto top-ups;
- 5.2 if and for any period in respect of which: -
- (a) the Operator is providing a Minimum Retail Service; or
 - (b) the rate of commission payable by the Operator to TTL pursuant to Clause 11.1 is 1.5%
- the commission payable shall be 1.5% for all PAYG Value Added transactions other than those covered by paragraph 5.1 above;
- 5.3 where paragraph 5.2 does not apply, or where an Operator elects to exercise the option described in Clause 11.2, 2.5% for all PAYG Value Added transactions other than those covered by paragraph 5.1 above.
6. Any Commission due to a retailing Operator shall be deducted by RSP from the amounts of PAYG Value Added payable by the Operator to TTL for retailing. Such amounts payable shall be paid by the Operator in accordance with the terms of the Amended Clearance Agreement.
7. (a) Retailing by an Operator shall involve the following obligations and responsibilities of TTL:
- TTL will supply, free of charge, retailing consumables such as registration forms, TTL Smartmedia etc.
 - TTL will be entitled to receive and to retain any charges incurred by customers relating to TTL Smartmedia less the commission payable to the Operator.
 - TTL will have no responsibility or obligation to provide customer information and after sales support at stations where retailing takes place but for the avoidance of doubt, this will be without prejudice to TTL's obligations to provide the TTL Help Line Service, and its obligations described in Clause 32.2(b) of the Agreement in respect of the provision of access to data.
- (b) The Operator shall have no obligation to carry out any PAYG refunds, balance adjustments or smartmedia repayments as may be due to customers.
8. Notwithstanding any other provision of this Agreement, each Operator shall be responsible for the provision of the equipment necessary to carry out retailing at its premises and bear all of its costs associated with providing the retail service, unless agreed otherwise by TTL. All such equipment used is required to have been Accredited. Where the equipment is a TVM utilising a Pearl Device, connection of that equipment shall be governed by and subject to paragraph 18.(f)(vi) and Appendix 1 of this Schedule 8 and Appendix 2.7 to Schedule 4.

9. Where TTL has undertaken development work (e.g. to establish hardware solutions suitable to a station retailing environment), TTL undertakes to make the benefits of this work available to the Operators where requested by the Operators. TTL does not intend to make a profit from passing on such benefit to the Operators but will be entitled to recover incremental costs from the Operators who opt to take such benefit (to include an appropriate proportion of TTL's development costs).
10. In addition but subject to paragraphs 8 and 9 and 11 and 12, TTL undertakes that its Ticketing Services Provider will make available for use in Operator ticket offices, the retailing solution for Ticket Stops that has been developed for TTL.
11. In the event of an Operator adopting the Ticket Stop solution, TTL will make a charge equal to 1% of the PAYG Value Added to cover the Ticketing Services Provider's charges for the provision of the retailing device and for associated set-up costs and transaction related costs. These are equivalent to the costs paid by TTL to its Ticketing Services Provider in respect of the Ticket Stop network.
12. For the avoidance of doubt, TTL does not agree to carry out any development of its Ticket Stop solution to meet the retailing needs of the Operators. Any such development work will need to be agreed separately between the Operators, their retailing solution suppliers and TTL.
13. TTL agrees that any Operator may utilise TTL's PAYG web system for the purposes of retailing PAYG from an Operator's own website. The Operator would then be able to brand any internet sales channel with its own branding.

Any development of the TTL web system to accommodate its use by the Operators (e.g. to increase its capacity) is outside the scope of this Agreement and will need to be agreed separately.
14. Notwithstanding paragraph 13 TTL agrees to cooperate with the Operators to develop a joint business case for an augmented web-system.
15. The rates of Commission to be applied in the case of "joint" internet sales involving an Operator site linked to the TTL web-system, will be considered as part of the joint business case development.
16. For the avoidance of doubt, it is agreed that all PAYG validation devices at the Operator Stations will be enabled and may be promoted by TTL as pick-up points for TTL's web-retailing solutions in respect of PAYG, including one-off ("ad-hoc") loads of PAYG Value Added and automated transactions to top-up customers' PAYG Balances. Commission arrangements for these PAYG transactions will be as agreed in paragraph 5 above. The pick-up of any other ticketing products (including Travelcard) will be subject to the commercial terms agreed pursuant to the relevant agreement between the Parties governing those products. For the avoidance of doubt, until otherwise agreed by the Parties, TTL shall not be entitled to use any PAYG validation devices

at Operator Stations as pick up points for any other ticketing products including Travelcards.

17. TTL has established, but not yet fully proven, a system that will enable fare products and PAYG top-ups to be ordered over the internet from a mobile device such as a smart-phone and delivered in near real time to an on-system validation device. At such time as this system becomes fully operational, TTL undertakes to make it possible for holders of TTL Smartmedia to use this ordering system to arrange for an Extension Permit to be collected from a validation device at a specified station.

18. TTL:-

(a) acknowledges that Operators wishing to retail PAYG Value Added may wish to enter into arrangements to obtain a supply of Pearl Devices and then enter into arrangements to:-

(i) incorporate the Pearl Devices into TVMs supplied to the Operator by such suppliers; and/or

(ii) utilise TVM Retail Connections for the transmission of TVM Retail Transaction Data;

(b) acknowledges that the Pearl Device has been developed by Cubic pursuant to an agreement with TTL, to interface with TTL Smartmedia;

(c) subject to paragraph 18(e), warrants to the Operator that TTL Smartmedia will be capable of interfacing with the Pearl Device so as to enable:

(i) PAYG Value Added and Extension Permits to be correctly loaded onto TTL Smartmedia as instructed by the TVM;

(ii) TVM Retail Transaction Data to be correctly transmitted to and received from the TVM; and

(iii) the PAYG Balance held on an item of TTL Smartmedia to be read and communicated to the TVM;

(d) acknowledges that TTL is responsible for the correct processing by the PAYG System, in accordance with TTL's obligations under this Agreement, of the TVM Retail Transaction Data, subject to the same being received from the TVM supplier in accordance with the Ticketing Service Provider's required specification;

(e) without limitation, is not responsible:-

(i) for the interface between the Pearl Device and the TVM;

(ii) for any aspect of the functioning of the TVM nor of any back office system utilised by the TVM or by the Operator or the TVM supplier in connection with the TVM;

- (iii) for the TVM Retail Connections;
 - (iv) under this Agreement for the supply or maintenance of the Pearl Device (including any defect in the Pearl Device) unless otherwise agreed between TTL and the Operators pursuant to paragraph (f) below or otherwise. This paragraph does not limit TTL's obligations under paragraph 19 below;
- (f) agrees to co-operate in good faith with the Operators in order to facilitate the entering into by one or more Operators of appropriate arrangements with TVM suppliers, Cubic and/or TTL to enable the retailing via TVMs of PAYG Value Added by those Operators who wish to do so, including :-
- (i) joining in discussions between Operators and TVM suppliers and/or Cubic;
 - (ii) discussing in good faith with Operators the extent to which any such arrangements are to be reflected in amendments to this Agreement. For the avoidance of doubt, to the extent that such arrangements result in TTL having an obligation to the Operators to supply or procure the supply of any further goods or services (including in respect of the Pearl Device) then TTL agrees that the "Pricing Principles" described in paragraph 1 of Part III of Schedule 4 will apply (mutatis mutandis) in respect of the pricing of such supply;
 - (iii) through the carrying out by TTL of its obligations under Clause 8.5 to use reasonable endeavours to encourage the development of an open market in the supply of relevant PAYG compatible devices;
 - (iv) by considering in good faith whether and the extent to which it may be able (without prejudicing its own position) to influence the approach taken by Cubic or any other relevant TTL contractor in connection with such arrangements;
 - (v) where TTL is acquiring Pearl Devices for its own purposes, by using reasonable endeavours to secure the agreement of TTL's supplier that it will offer to supply an Operator direct on the same terms as that supplier has agreed with TTL; and
 - (vi) if requested by an Operator, entering into an agreement with that Operator in the form set out in Appendix 1 to this Schedule 8 (a "Pearl Device Agreement"). The Operator acknowledges that, unless otherwise agreed, such an agreement must be in place before the Operator is entitled to retail PAYG Value Added via a TVM utilising a Pearl Device.

19. (a) Without limiting the exclusions of responsibility on the part of TTL set out in Clause 18 (e) and subject to paragraphs (b)-(e) inclusive below, TTL shall use all its reasonable endeavours to procure that the Nominated Provider will, within a reasonable time following a request by an Operator, enter into contractual arrangement(s) with that Operator or its nominated TVM supplier to:-

- (i) provide an Operator or an Operator's nominated TVM supplier with Pearl Devices, and all licences necessary to operate such Pearl Devices; and
- (ii) warrant or provide similar comfort that any such Pearl Devices which is so supplied and which is installed in a TVM Accredited by the Nominated Provider will correctly communicate between the TVM and TTL Smartmedia; and
- (iii) provide reasonable support for such Pearl Devices; and
- (iv) provide the matters set out in paragraphs (i) to (iii) above for so long as a Pearl Device Agreement entered into pursuant to paragraph 18(f)(vi) in respect of those Pearl Devices remains in force in respect of those Pearl Devices, and at no additional charge to the Operator or its nominated TVM supplier other than consideration of £1 per annum per Pearl Device.

For this purpose, reasonable endeavours will include taking reasonable steps to initiate and join in discussions, but for the avoidance of doubt shall not require TTL to enter into a contractual commitment with, or make any payment to, the Nominated Provider in order to procure the Nominated Provider's agreement to enter into such arrangements.

- (b) subject to paragraph 19(c), if the Nominated Provider will not agree to enter into the contractual arrangement(s) described in paragraph 19(a) with an Operator or its nominated TVM supplier following a request by them, the provisions of paragraph 19(d) shall apply.
- (c) paragraphs 19(b), (d) and (e) shall not apply if in response to an Operator's request, the Nominated Provider offers to enter into contractual arrangement(s) in respect of Pearl Devices on:-
 - (i) substantially the same terms as it (or a predecessor Nominated Provider) has entered into contractual arrangements in respect of Pearl Devices with TVM suppliers prior to the date of this PAYG Agreement; or
 - (ii) substantially on those terms, but with such amendments as it may be reasonable for the Nominated Provider to require having regard to any difference in the circumstances of

such prior transactions and the circumstances applying to the Operator's request)

but in either case provided that the Nominated Provider agrees any changes to such terms as are reasonably required to remove the ability for the Nominated Provider after 2014 to charge additional amounts to recover the Nominated Provider's investment in the development of the Pearl Device (whether by the application of a termination charge of the type which has been included in Appendix 1 to Schedule 8 or otherwise).

- (d) where paragraph 19(b) applies, then:-
 - (i) the Operator may give TTL written notice to that effect including details of the alleged failure by the Nominated Provider and shall give TTL such further detail as TTL may reasonably request. The Operator will act reasonably in co-operation with TTL in any steps which TTL may reasonably propose in an attempt to secure agreement between the Nominated Provider and the Operator and/or the Operator's nominated TVM supplier.
 - (ii) if the Nominated Provider will still not agree to enter into the relevant contractual arrangement(s) within 90 days of the service of the Operator's notice under paragraph 19(d)(i), then paragraph 19(e) shall apply.
- (e) Where this paragraph 19(e) applies, then as its sole remedy against TTL in respect of the Nominated Provider's failure to enter into the contractual arrangement(s) described in paragraph 19(a):-
 - (i) the Operator's liability to pay the annual Fee defined in and payable in respect of the relevant Pearl Devices under the Pearl Device Agreement shall not apply for the period of such failure (being the period from the expiry of the 90 day period referred to in paragraph 19(d)(ii) until such time as, subject always to paragraph 19(c), the Nominated Provider agrees to enter into contractual arrangement(s) described in paragraph 19(a)) ("the Failure Period") and where the Failure Period is less than a Year, the relevant annual Fee shall be prorated accordingly ; and/or
 - (ii) irrespective of whether the Operator is providing the Minimum Retail Service and notwithstanding those provisions in Clause 11 of the Agreement and/or paragraph 5 of this Schedule which deal with the rate of commission which is payable and receivable by the Operator, the Operator shall be entitled by written notice to TTL to elect, for the period of such failure, either to pay and receive commission at the rates set out in:-
 - (1) Clause 11.1 (a) and paragraph 5.2; or
 - (2) Clause 11.1(b) and paragraph 5.3.

Appendix 1

Pearl Device and TVM PAYG Retail Capability

Agreement supplemental to the PAYG Agreement between TTL ("TTL") and the Operator (and other operators) dated [] ("PAYG Agreement")
DATED [] 2009

PARTIES

This Agreement is made between:

1. [Insert name, address and number of Operator] (the "Operator"); and
2. TRANSPORT TRADING LIMITED, a company registered in England and Wales under number 03914810 whose registered office is at Windsor House, 42/50 Victoria Street, London SW1H 0TL ("TTL");

WHEREAS

- (i) The Operator (together with other operators) has entered into an agreement with TTL ("the PAYG Agreement") which provides, inter alia, for the acceptance of "Pay As You Go" on TTL's smartmedia technology as a payment medium for passenger transport services on rail services operated by the Operator and those other operators.
- (ii) The Operator has contracted with or wishes to contract with the TVM Supplier(s) for the provision of TVMs with PAYG retail capability utilising a Pearl Device to be located at the Pearl Stations and it is acknowledged that in connection therewith, the Operator or its TVM Supplier(s) may wish to enter into contractual arrangements with the Nominated Provider of the type described in and provided for in paragraph 19 of Schedule 8 to the PAYG Agreement.
- (iii) The Nominated Provider:-
 - (a) will charge for the provision of Pearl Devices and associated services to the Operator or its TVM Supplier(s) under such contractual arrangements, and
 - (b) has made an investment in developing the Pearl Device which it is entitled to recover over the period up to the end of 2014

TTL is recovering these amounts (to pass through to the Nominated Provider) through the fees payable under this agreement, which reflect the charges referred to in (a) and (through the level of those charges and the Termination Fee arrangements contained in this agreement) the agreed methodology for the recovery referred to in (b).
- (iv) This PAYG retail functionality can only be provided if TTL confirms to the Nominated Provider TTL's consent to the supply of the Pearl Device to the TVM Supplier(s) and connection of the Pearl Devices within the TVMs to the PAYG System.
- (v) This Agreement :-

- (a) confirms the terms under which TTL has agreed to provide that consent to support the provision of PAYG retail capability from the TVMs at the Pearl Stations; and
 - (b) contains the arrangements necessary to provide for the recovery of the amounts described in paragraph (iii).
- (vi) For the avoidance of doubt, TTL makes no charge under this Agreement for its consent described in paragraph (iv) above.

THE PARTIES AGREE THAT:

1. Words and phrases used in this Agreement are as defined in the PAYG Agreement, unless inconsistent with the context, or unless expressly stated otherwise as follows, or within the Agreement:-
 - 1.1 "Authentication Server" means a device linked to the TVM Supplier's back office system which interfaces with the Operator Pearl Device to confirm to the Operator Pearl Device that the Operator Pearl Device is connected to an authorised back office system;
 - 1.2 "Failure" means where either party reasonably considers that the PAYG System and the TVM Supplier Elements are not operating properly together;
 - 1.3 "Fraudulent PAYG Journey" mean a PAYG Journey made using an item of TTL Smartmedia to which PAYG Value Added has been added using a lost or stolen Operator Pearl Device or Authentication Server;
 - 1.4 "Insolvent" means a party has a receiver, administrator or provisional liquidator appointed or passes a resolution for its winding-up or a court makes a winding up order in respect of it or it enters into any composition or arrangement with creditors or it ceases to carry on business or any steps or actions are taken in connection with any of these procedures;
 - 1.5 "Installation" means the manner in which any equipment or device is configured and connected;
 - 1.6 "Location Code" means the transaction code which is to be given by the TVM to the Pearl Device to enable the Pearl Device to identify where it is situated in all transactions;
 - 1.7 "Operator Pearl Device" means a Pearl Device supplied by the Nominated Provider to a TVM Supplier for the Operator's use and includes, for the avoidance of doubt, any Pearl Device supplied as a spare for potential use by the Operator;
 - 1.8 "Partial Termination" shall have the meaning given in Clause 2.2;
 - 1.9 "Pearl Station" means a station listed in Appendix A;
 - 1.10 "Scheidt & Bachmann" means Scheidt & Bachmann GmbH, a company registered in Moenchengladbach, Germany (Company Registration

Number HRB 2125) whose registered office is at Breite Str. 132, 41238 Moenchengladbach, Germany;

- 1.11 "Shere" means Shere Limited, a company registered in England and Wales with registration number 00078235 and whose registered office is at 4 Bridge Park, Merrow Lane, Guildford, Surrey GU4 7BF;
- 1.12 "Siting" means the physical location in which any item of equipment, device or cabling is placed;
- 1.13 "TVM" means as defined under the PAYG Agreement, with the addition of other ticket issuing systems;
- 1.14 "TVM Supplier" means the supplier(s) of the TVMs and Operator Pearl Devices to the Operator being either Shere or Scheidt & Bachman or (subject always to Clause 3.2), another supplier approved by TTL for this purpose (such approval not to be unreasonably withheld or delayed); and
- 1.15 "TVM Supplier Elements" means any or all of any TVM, TVM Supplier's back office system and/or the communications links described in Clauses 4.3.1 and 4.4.1.

2. Duration and Termination

2.1 This Agreement shall commence on the date of this Agreement.

2.2 Subject to Clause 2.4.4, this Agreement shall continue unless and until: -

2.2.1 terminated by not less than 60 days prior written notice from the Operator served on TTL at any time; or

2.2.2 termination (including expiry) of the PAYG Agreement in its entirety or in respect of the Operator, at which time this Agreement shall terminate automatically. If the PAYG Agreement terminates in respect of the Operator in respect of one or more but not all of the Pearl Stations, then this Agreement will be regarded as having been terminated in respect of that/those Pearl Station(s) ("Partial Termination"); or

2.2.3 terminated by TTL pursuant to Clause 2.3.

2.3 Suspension and Termination

2.3.1 If the Operator: -

2.3.1.1 commits a material breach of this Agreement which cannot be remedied; or

2.3.1.2 becomes Insolvent

TTL may terminate this Agreement at any time thereafter by giving written notice to that effect to the Operator, in which case, subject to Clause 2.4.4, this Agreement shall terminate with effect from the time stated by TTL in the notice.

- 2.3.2 If the Operator commits a material breach of this Agreement which can be remedied, TTL may suspend this Agreement if the Operator fails to remedy that breach within thirty days of a written notice setting out the breach and requiring it to be remedied being given by TTL. Following such suspension: -
- 2.3.2.1 If the Operator remedies such breach to the reasonable satisfaction of TTL within sixty days of such notice, TTL will notify the Operator of its intention to resume this Agreement ("Resume Notice"), and the date on which this Agreement is to be resumed (to be no later than 7 days from the date of the Resume Notice);
- 2.3.2.2 If the Operator fails to remedy such breach in accordance with Clause 2.3.2.1, TTL may terminate this Agreement at any time thereafter by giving written notice to that effect to the Operator, in which case, subject to Clause 2.4.4, this Agreement shall terminate with effect from the time stated by TTL in the notice.
- 2.4 On and from the time of any total or Partial Termination of this Agreement: -
- 2.4.1 the Operator acknowledges that it shall have no entitlement to use and shall not use any Operator Pearl Device, notwithstanding the terms of the PAYG Agreement or any other agreement between the parties to this Agreement and/or any other parties, unless otherwise agreed by TTL for the purposes of this Clause;
- 2.4.2 the terms of Clause 3.4 shall apply unless upon such termination the rights and obligations of the Operator under this Agreement have been transferred by operation of law in accordance with Clause 2.5, or have been transferred to TTL;
- 2.4.3 the Operator shall be responsible for the return of each Operator Pearl Device to TTL or to such other person as TTL may direct for this purpose; and
- 2.4.4 until an Operator Pearl Device is received by TTL (or such other person as it may have directed in accordance with Clause 2.4.3), the Operator shall, without prejudice to Clause 2.3.1, continue to be bound by all of its obligations under this Agreement in respect of that device. This obligation shall be satisfied if the Operator Pearl Device has been returned to the Nominated Provider.

Where this Agreement has terminated in respect one or more but not all of the Operator Pearl Devices, a reference in this Clause 2.4 to an Operator Pearl Device shall be a reference to each Operator Pearl Device in respect of which the Agreement has terminated.

2.5 For the avoidance of doubt, this Agreement may be transferred to one or more Successor Operator(s) with the agreement of TTL (not to be unreasonably withheld or delayed).

2.6 Termination is without prejudice to any rights, obligations, claims (including without limitation claims for damages for breach) and liabilities which have accrued prior to the date of termination.

3. Charges

3.1 Subject to Clauses 3.3 and 3.7, the Operator will pay to TTL a fee of £516 (the "Fee") per Operator Pearl Device per annum, commencing on the date of delivery of the Operator Pearl Device to the TVM Supplier. For the avoidance of doubt, a Fee is payable in respect of any Operator Pearl Device supplied for use as a spare.

3.2 The Fee (and the Operator's entitlement to use the Pearl Device and to have it connected to the PAYG System) is based on the system architecture for common TVM Supplier back offices provided by Shere and Scheidt & Bachmann and in existence at the date of the PAYG Agreement. If this architecture requires revision at any time (including, but not limited to where:-

3.2.1 TTL's consent is sought to the addition of an additional TVM Supplier; and/ or

3.2.2 one or more Operators wish to connect to the central system within the PAYG System other than through the back office system of a TVM Supplier)

then such revision shall be subject to TTL's consent and TTL reserves the right as a condition of such consent to revise (a) the Fees so they are reasonably commensurate with any additional costs TTL may incur as a result, and (b) any other aspect of this Agreement as may be reasonably necessary to take account of the revised structure.

3.3 The Fee (but not, for the avoidance of doubt, the Termination Fee) is stated in June 2007 prices and will be indexed in August of each year (the "Adjustment Month") from and including August 2009 by reference to the change in:-

3.3.1 the level of Retail Prices Index for June 2007; and

3.3.2 the level of the Retail Prices Index for the June immediately preceding the Adjustment Month.

3.4 Subject to Clause 3.5, in the event of any total termination or Partial Termination of this Agreement during or before 2014, the Operator further agrees to pay TTL the relevant sum as set out below for the applicable year in which such termination occurs (the "Termination Fee"):

Year	Sum Payable per each affected Operator Pearl Device

2009		
2010		
2011		
2012		
2013		
2014		

and

- 3.4.1 the Termination Fee shall be payable on termination or within 8 weeks after the date of notification of termination of this Agreement (whichever is the sooner); and
- 3.4.2 The Operator shall not be entitled to set off its liability to TTL to pay the Termination Fee against any liability of TTL to the Operator, whether under this Agreement or any other agreement or arrangement between the parties.
- 3.5 The Termination Fee will not be payable by the Operator where this Agreement terminates as a result of the termination of the PAYG Agreement by TTL giving not less than 24 months prior notice pursuant to Clause 18.1(a) thereof.
- 3.6 The Fee (including for this purpose the Termination Fee) shall be subject to price review as follows:-
- 3.6.1 the principles of the price review shall be :-
- 3.6.1.1 TTL shall not make any provision in the Fee for making a profit;
- 3.6.1.2 the Fee is intended to represent the cost to TTL of the arrangements described in this Agreement and its Recitals;
- 3.6.1.3 TTL will apply common Fees across all Operators (as that term is defined in the PAYG Agreement);
- 3.6.1.4 TTL shall use all reasonable endeavours to maintain its ability to comply with the terms of this Agreement for the same or lower cost (subject to the indexation described in Clause 3.3);
- 3.6.2 the first price review shall take place with effect from the expiry of the interim contract which TTL has entered into with Cubic and which will take effect in 2010 and expire in 2013; and
- 3.6.3 the process for the review shall be based (with all necessary changes) on the process described in paragraph 2 (*Pricing Review Process*) of Part III of Schedule 4 to the PAYG

Agreement as if, for that purpose, the Fee was a TTL Charge and TTL being a party to this Agreement and complying with its obligations hereunder was a TTL Service.

3.7 The Operator's obligation to pay the Fee in respect of an Operator Pearl Device is subject to the terms of paragraph 19(e)(i) of Schedule 8 of the PAYG Agreement.

4. Other Operator Obligations

4.1 TVMs

The Operator shall only use a TVM which incorporates an Operator Pearl Device in order to retail, if the TVM and the incorporated Operator Pearl Device are Accredited.

4.2 Theft/Loss

4.2.1 The Operator shall: -

4.2.1.1 take reasonable steps to monitor whether an Operator Pearl Device is stolen or lost and let TTL know as soon as practicable after it becomes aware that an Operator Pearl Device is stolen or lost; and

4.2.1.2 take reasonable steps to ensure that it is made aware by its TVM Supplier that an Authentication Server is stolen or lost and let TTL know as soon as practicable after it becomes so aware.

4.2.2 Without limiting Clause 4.2.1, where an Operator Pearl Device or Authentication Server is stolen or lost then in respect of the time from when the Operator Pearl Device or Authentication Server is stolen or lost (regardless of when the theft or loss is reported), until 24 hours after the earlier of when such theft or loss is reported to TTL, or when TTL otherwise knew or ought reasonably to have known of the theft (including, without limitation, where notified by another operator under the PAYG Agreement):-

4.2.2.1 TTL shall not be liable to the Operator under the PAYG Agreement to the extent that such liability would not have arisen but for such theft or loss;

4.2.2.2 the Operator shall indemnify TTL in respect of loss or damage incurred by TTL as a consequence of such theft or loss (excluding any indirect or consequential losses) including in respect of any revenue allocated in respect of Fraudulent PAYG Journeys to the Operator or any other operator under the PAYG Agreement.

4.2.3 Notification under Clause 4.2.1 shall be given to such person as TTL may notify the Operator for this purpose from time to time.

4.2.4 If:-

4.2.4.1 the Operator is liable to indemnify TTL under this Clause 4.2 and a Related Other Operator also has an obligation to indemnify TTL in relation to the same theft of loss or a related theft or loss; and/or

4.2.4.2 the circumstances in Clause 4.5.2.2 apply

then TTL acknowledges that (i) the proportions in which the Operator and any and each Relevant Other Operator will be liable to TTL and/or (ii) the extent to which its or their respective liabilities will be reduced to take account of the circumstances in Clause 4.5.2.2 will be such amount as is reasonable in all the circumstances of the particular facts. If this cannot be agreed by all the affected parties, it is agreed that the matter may be referred by any of them for resolution in accordance with Clause 11. For the purposes of this Clause:

(a) subject to paragraph (b) below, "Related Other Operator" means another Operator under the PAYG Agreement who has entered into an agreement in the form of this Agreement with TTL pursuant to paragraph 18 of Schedule 8 of the PAYG Agreement; and

(b) if and for so long as the London Overground Operator (and/or any other third party who is not an "Operator" for the purposes of the PAYG Agreement) operates TVMs with retail capability utilising a Pearl Device and/or shares the use of any other relevant TVM Supplier Elements with an Operator or any Related Other Operator, then the London Overground Operator and/or any such third party will be deemed to be a Related Other Operator.

4.3 Other Security Issues

4.3.1 The Operator shall take all reasonable steps from time to time to keep each of:-

4.3.1.1 the Operator Pearl Devices;

4.3.1.2 the TVMs in which any Operator Pearl Device is installed; and

4.3.1.3 the back office system(s) of the TVM Supplier(s) to which the TVM is connected

appropriately physically and logically secure with a view to eliminating or (to the extent that is not reasonably possible) minimising the risk of the PAYG System being accessed by or interfered with by or as the result of the actions of an unauthorised person.

4.3.2 For the purposes of Clause 4.3.1, "reasonable steps" shall include but not be limited to: -

4.3.2.1 taking reasonable steps to physically secure or enclose equipment and devices in order to prevent and discourage opportunist removal or interference;

4.3.2.2 except in the case of the Operator Pearl Device when it is secured to a TVM, and for the TVM itself, where reasonably practicable siting equipment, devices and cabling in areas not usually accessible by customers or the general public;

4.3.2.3 taking reasonable steps to apply procedures for managing access to equipment, devices cabling and data in order to prevent and discourage unauthorised or unnecessary access;

4.3.2.4 housing of back office equipment in rooms having physical access controls such as doors with locks, pin pads or swipe card systems;

4.3.2.5 applying reasonable procedures for managing the introduction of new software onto the back office systems and for the detection and removal of unauthorised software;

4.3.2.6 using antivirus software to detect and control viruses, worms and other types of malware; and

4.3.2.7 wherever reasonably practicable, ensuring physical and logical segregation of equipment and data from third parties having necessary access to the equipment room, the equipment itself or the data

provided that an Operator will be deemed to have taken reasonable steps for the purpose of Clause 4.3.1 where the steps taken are the same or equivalent to those that TTL takes in respect of equivalent installations on TTL's own estate.

4.4 Data Integrity

4.4.1 The Operator shall ensure that the communications links: -

- (a) between each TVM incorporating an Operator Pearl Device and the back office(s) of the applicable TVM Supplier(s); and

(b) between any such back office and the central system of the PAYG System

are procured and maintained against a specification to meet the capability requirements set out in Clause 4.4.2.

4.4.2 The requirements are that the communications links should be capable of enabling: -

4.4.2.1 the effective, complete and uncorrupted (i) transmission of transactional data from the Operator Pearl Device to the central system of the PAYG System; and (ii) transmission and receipt of control data (including hotlists) between the Operator Pearl Device and the central system of the PAYG System; and

4.4.2.2 such transaction data to be transmitted from each Operator Pearl Device to the central system of the PAYG System not less frequently than once in every 48 hours, and shall use reasonable endeavours to ensure that such transmission is capable of occurring not less than once in every 24 hours

4.4.2.3 Communications links established and maintained to the same or equivalent capability standards as the communication systems of the TVM Suppliers in place on the TTL estate at the time of the PAYG Agreement shall be deemed to have satisfied the obligations in Clause 4.4.1.

4.4.3 The Operator shall:-

4.4.3.1 return any failed Operator Pearl Device to the Nominated Provider promptly after such failure, with a target of doing so within 24 hours;

4.4.3.2 ensure:

(a) that each Operator Pearl Device is provided with the correct Location Code; and

(b) that a list of such Location Codes is provided to TTL

prior to the applicable Operator Pearl Devices going into operation and on each occasion that (i) any replacement or

additional Operator Pearl Devices are to be placed in operation and (ii) there is any change in any Location Code applied to any Operator Pearl Device;

4.4.3.3 ensure that the TVM Supplier is required to test the Base Data with the aim of demonstrating that it does not have an unintended impact on the TVM or operation of the Operator Pearl Device when integrated into the TVM; and

4.4.3.4 ensure that reasonable steps are taken in the siting of any item of equipment, device and cabling:-

(a) in order to minimise the risk of damage from environmental hazards such as water and other forms of moisture, accidental collisions, excessive or constant vibration and extremes of temperature;

(b) such that it is not subject to interference from other equipment, devices or cabling and does not itself interfere with the function of other equipment or cabling

provided that an Operator will be deemed to have taken reasonable steps for the purpose of Clause 4.4.3.4 where the steps taken are the same or equivalent to those that TTL takes in respect of equivalent installations on TTL's own estate.

4.5 Consequences of Operator's failure to comply

4.5.1 Without limitation, in the event of any breach by the Operator of its obligations under any of clauses 4.3 - 4.4 inclusive and subject to Clause 4.5.2 :-

4.5.1.1 TTL shall not be liable to the Operator under the PAYG Agreement or otherwise, to the extent that such liability would not have arisen but for any breach by the Operator of such obligations; and

4.5.1.2 the Operator shall indemnify TTL in respect of any liability TTL may have to any other operator under the PAYG Agreement or to RSP under the Amended Clearance Agreement to the extent such liability would not have arisen but for such breach; and

4.5.2 The Operator shall not be liable for any loss or damage suffered or incurred by TTL arising out of any breach by the Operator of its obligations under this Clause 4 to the extent that:-

4.5.2.1 the breach arises solely as a consequence of the Operator acting in accordance with the instructions of TTL (or the Nominated Provider); or

4.5.2.2 TTL could have taken and has failed to take reasonable steps to prevent the loss or damage occurring (to the extent that the loss or damage was reasonably foreseeable and within TTL's reasonable control to prevent) and/or fails to take reasonable steps to mitigate such loss or damage.

5. Failure

5.1 Without limiting any other provision of this Agreement, if either party becomes aware of a Failure it shall make the other party aware of such failure as soon as reasonably practicable (in the case of the Operator, by informing the designated helpdesk (as notified by TTL for the purpose from time to time)) of the failure. Once reported:-

5.1.1 the helpdesk will carry out a preliminary investigation.

5.1.2 if that investigation reveals that if and to the extent that the Failure has on a balance of probabilities arisen from:-

5.1.2.1 a fault in the PAYG System ; or

5.1.2.2 any failure by TTL to comply with its obligations under the PAYG Agreement in respect of the Operator's retailing of PAYG Value Added utilising a Pearl Device

then TTL will (i) carry out its rectification of the Failure as soon as reasonably practicable and (ii) bear the costs of the investigation.

5.1.3 if and to the extent that the investigation reveals that the Failure has on balance of probabilities arisen from a fault in any TVM Supplier Element or the Operator Pearl Device, TTL will notify the Operator of its findings and the Operator:-

5.1.3.1 will be responsible for rectifying or procuring the rectification of the TVM Supplier Element or the Operator Pearl Device;

5.1.3.2 will bear the costs of the preliminary investigation;

5.1.3.3 may request TTL to carry out further investigation or rectification works. TTL

shall use reasonable endeavours to comply with any such request. Any such further work shall be at the Operator's expense which TTL will use all reasonable endeavours to minimise.

5.2 If, in the reasonable opinion of TTL, connection of any of the TVM Supplier Elements to the PAYG System is causing damage to the PAYG System, TTL will have the right to disconnect the same and will notify the Operator of such disconnection as soon as reasonably practicable with details of the nature and extent of the damage caused to the PAYG System.

6. Acknowledgements

6.1 The parties acknowledge that:-

6.1.1 the PAYG Agreement provides separately for the provision by TTL of certain "Systems Operation Services" for operators utilising Pearl Devices to retail PAYG Added Value; and

6.1.2 nothing in this Agreement shall supersede or affect the operation of those provisions in the PAYG Agreement.

6.2 The Operator acknowledges that, without limiting the PAYG Agreement, nothing in this Agreement is intended to, nor shall it, make TTL responsible for the supply or maintenance of any Pearl Device nor, of itself, transfer to or create in favour of the Operator any right or title in or to any Pearl Device.

6.3 TTL acknowledges that the design criteria it specified in respect of the Pearl Devices to the Nominated Provider included a "Mean Time between Failure" of 30,000 hours.

6.4 The Operator acknowledges that TTL is not responsible for the TVM charging the correct fare.

7. Connection for retail

7.1 If TTL refuses to permit an Operator Pearl Device to be connected to the PAYG System to enable it to be used by the Operator for retail purposes as anticipated by this Agreement, then: -

7.1.1 provided such refusal does not arise in connection with the Operator failing to carry out any of its applicable obligations hereunder in relation to such connection; and

7.1.2 subject to Clause 5.2

then the Operator will not be obliged to pay the Fee for the period where the Operator Pearl Device is not connected.

8. Assistance

TTL will use all reasonable endeavours to procure that TTL's Nominated Provider accepts (as part of any agreement entered into by the

Nominated Provider with the Operator or its nominated TVM Suppliers to enable the retailing of PAYG Added Value by the Operator via TVMs utilising Pearl Devices) , a commitment in favour of the Operator or its nominated TVM Suppliers in respect of the turn round time within which a replacement Operator Pearl Device will be issued (following the return of a defective Operator Pearl Device to Cubic), with an objective of seeking a 24 hour turn round time. Reasonable endeavours will include taking reasonable steps to initiate and join in discussions, but for the avoidance of doubt shall not require TTL to enter into a contractual commitment with, or make any payment to, any party in respect of such commitment or make TTL responsible for the Nominated Provider's compliance with any such commitment.

9. Previous agreement

Subject to Clause 6 above, this Agreement replaces and supersedes any previous agreement between the Operator and TTL in connection with the support by TTL of the provision of Oyster retail capability at the Pearl Stations, which agreement shall cease to have effect from the date of this Agreement but without prejudice to any accrued rights and liabilities of the parties as at that date.

10. Governing Law and Jurisdiction

10.1 This Agreement shall be governed by and construed in accordance with English law and is subject to the exclusive jurisdiction of the English courts.

11. Dispute Resolution

11.1 The provisions of Clauses 22.1 - 22.14 and Clauses 22.22 - 22.23 (inclusive) of the PAYG Agreement shall apply mutatis mutandis to this Agreement as if references in Clauses 22.1-22.14 and Clauses 22.22 - 22.23 (inclusive) and Schedule 11 (where applicable):-

11.1.1 to the PAYG Agreement, were references to this Agreement;
and

11.1.2 to the Operators and/or ATOC, were references to the Operator.

11.2 The Parties acknowledge that any joinder of disputes will be dealt with under the provisions of Clauses 22.15 - 22.21 (inclusive) of the PAYG Agreement.

SIGNED by

For and on behalf of

The Operator

SIGNED by

For and on behalf of

Transport Trading Limited

Appendix A

List of Pearl Stations

[to be completed when the Agreement is signed to include those locations at which the Operator wishes TVMs with PAYG retail capability utilising a Pearl Device to be located]

SCHEDULE 9

Change Control Procedure

1. Where Clause 17 of this Agreement or any other part of this Agreement (or any Implementation Agreement or Services Agreement) otherwise explicitly contemplates and provides that this Change Control Procedure shall apply either of ATOC or TTL (as applicable) may at any time issue a formal change request in accordance with the procedure set out in this Schedule 9.
2. A proposal to make a Change by either TTL or ATOC ("the Proposer") shall be submitted to the other Party in the form of two copies of a Change Control Notice ("CCN") and the receiving Party shall promptly review the same and give a written response within 21 calendar days or such other period as the Parties may agree in writing. Such response may include a request for additional information and the Proposer shall use its reasonable endeavours to provide such information promptly and in any event within 21 calendar days.
3. Each CCN shall contain:
 - (a) the title of the CCN;
 - (b) the originator and date of the request or recommendation for the amendment;
 - (c) the reason for the amendment;
 - (d) full details of the amendment including any specifications;
 - (e) the cost implications of the amendment, including but not limited to non recurring costs, recurring costs, TTL Charges and retailing costs (if any);
 - (f) a timetable for implementation, including terms governing the implementation of the Change, together with any proposals for acceptance of the Change;
 - (g) a schedule of paying or reimbursements in respect of the cost implications if appropriate;
 - (h) details of the likely impact, if any, of the amendment on other aspects of this Agreement;
 - (i) the date of expiry of validity of the CCN;
 - (j) provision for signature by TTL and by ATOC.
4. Each Party shall give full consideration to any Change proposed. The Parties shall use all reasonable endeavours to agree the matters referred to in the CCN provided that:

- (a) where TTL is proposing to introduce or amend charges in connection with any Change it shall comply with the pricing principles set out in paragraph 1 (*Pricing Review Principles*) of Part III of Schedule 4 (so far as they are applicable and mutatis mutandis);
 - (b) where an Operator is requesting alterations in the layout and/or quantities of PAYG Equipment for which the Operator is responsible at Operator Stations (other than Joint Stations), TTL shall not be entitled to object to the fact of alterations in the layout and quantities, subject always to the Operator retaining the minimum amount of PAYG Equipment pursuant to Schedule 5, paragraph 5. The terms of undertaking such alteration will be subject to agreement between TTL and the Operator, such agreement not to be unreasonably withheld or delayed and to be on the basis of the following principles: -
 - (i) paragraph 11 of Schedule 14 shall apply; and
 - (ii) TTL shall use all reasonable endeavours to comply with the Operator's timescales in relation to the proposed change.
5. If the Change cannot be agreed within 45 calendar days of receipt of the CCN or such later date as the Parties may agree, then TTL shall be entitled to declare the Change to be a "Required Change" to be implemented in accordance with this Schedule 9 without the Operators' consent provided always that no such Required Change shall be implemented in relation to an Operator if and to the extent that it would place the Operator in breach of any franchise, licence or other regulatory obligation.
6. TTL shall consult with the Operators on all Required Changes and shall consider any reasonable amendments proposed by the Operators.
7. TTL will use reasonable endeavours to introduce a Required Change in such a way as to cause minimum impact on the relevant Operator's business.
8. In the case of a Required Change TTL shall: -
- (a) seek to minimise so far as reasonably possible the costs and losses incurred by the Operators as a consequence of the Required Change; and
 - (b) reimburse each Operator in respect of any costs and losses which it is agreed or determined have been reasonably incurred or suffered by that Operator as a consequence of the Required Change. For the avoidance of doubt such costs and losses will include:
 - (i) any increases to TTL Charges; and
 - (ii) any costs and losses which it is agreed or determined have been reasonably incurred or suffered by RSP as a consequence of the Required Change.

The Operator shall seek to minimise, so far as reasonably possible, any costs and losses incurred or suffered by it as a consequence of a Required Change.

9. Subject to paragraph 10: -
 - (a) TTL's obligation pursuant to paragraph 8 to make payment by way of compensation to an Operator shall crystallise and accrue from the time when such costs and losses have been incurred by the Operator and TTL shall not be liable to make payment(s) in advance of that time; and
 - (b) TTL shall compensate an Operator promptly for such costs and losses on receipt of full details in writing from the Operator of the amount(s) due and how they arose from the Required Change.
10. If TTL disputes the amount of costs and losses incurred or suffered and/or whether they arise as a result of the implementation of the Required Change and/or whether the Operator has complied with its obligations under paragraph 2.6(b) to seek to minimise, so far as reasonably possible, any costs and losses incurred or suffered by it as a consequence of a Required Change then TTL shall be entitled to have the matter referred for resolution in accordance with Clause 22. Pending agreement or determination TTL will compensate the Operator: -
 - (a) the undisputed amount of such costs and losses; and
 - (b) if requested in good faith by the Operator and except to the extent manifestly unreasonable, the amount of any disputed costs and losses. If arbitration under Clause 22 subsequently determines that the amount to which the Operator is entitled to in respect of compensation: -
 - (i) is higher than the amount already paid by TTL, TTL shall promptly pay the balance to the Operator; and
 - (ii) is a smaller than the amount already paid by TTL or no sum at all, the Operator shall promptly reimburse TTL the amount of any excess payments.

SCHEDULE 10

Marketing, Advertising and Public Statements

The Parties will co-operate to establish a set of operating standard terms and messages in order to promote and communicate PAYG and TTL Smartmedia to passengers, staff and the media.

1. Press Statements

Where a statement to the press by one Party has a bearing on another Party in relation to matters arising under this Agreement or the applicable Services Agreement or Implementation Agreement, all reasonable endeavours will be made by those Parties to agree the statement in advance.

2 Advertising

- (a) TTL shall not permit any form of advertising to be placed on any items of TTL Smartmedia without the prior written consent of ATOC, such consent not to be unreasonably withheld.
- (b) Subject to paragraph 2 (c) below, no announcements or advertisements shall be placed, attached or otherwise displayed from any PAYG Equipment except as otherwise previously agreed in writing and no vouchers or advertisements for goods or services shall be exhibited on any PAYG Equipment. The Parties acknowledge that when ownership in the PAYG Equipment is transferred to TTL from its Ticketing Services Provider the objective is to grant permission to the Operators to place, attach or otherwise display announcements or advertisement on the PAYG Equipment. Therefore the Parties will address and (acting reasonably) agree new methodologies for placing, attaching or otherwise displaying announcements or advertisements on any PAYG Equipment at that time, which will include ensuring that (i) there is no damage to the PAYG Equipment and that (ii) no messages are placed on the PAYG Equipment which are or may be confusing with PAYG.
- (c) If and to the extent that it is agreed that the PAYG Equipment can be used in connection with ITSO, TTL shall not unreasonably withhold or delay its consent for the placing of ITSO related logos on the PAYG Equipment, as long as such ITSO related logos comply with any applicable licence requirements.

3. Common Messages

- (a) TTL shall make available copies of material for use in the promotion of PAYG ("PAYG Marketing Material") in a format suitable (subject to paragraph 4) for the development of promotional material by the Operators, including but not limited to, reference material developed for PAYG campaigns, descriptions of PAYG, PAYG terminology, samples of promotional material and sample signage.
- (b) The Operators agree to use the PAYG Marketing Material in whole or in part where they believe that it is appropriate, in promotional and communication activities related to PAYG.

- (c) TTL shall use all reasonable endeavours to make the PAYG Marketing Material available, including execution of any third party licences, 5 months before the Anticipated PAYG Launch Date. Prior to this, TTL shall consult with ATOC on the format and scope of the PAYG Marketing Material, and wherever this is reasonable and practicable shall incorporate within it material supplied by the Operators relating to the operation of PAYG on the Operators' Services.
- (d) TTL may at any time add to or amend the PAYG Marketing Material. However, TTL shall consult with the Operators in advance prior to any changes and shall incorporate such suggestions and changes where this is reasonable and practicable. The Operators may also propose additions or amendments to the PAYG Marketing Material relating to the operation of PAYG on the Operators' Services and TTL shall incorporate such suggestions or changes where this is reasonable and practicable.
- (e) Subject to paragraph 4 and 5 of this Schedule 10 the Operators and/or each Operator shall be free to modify and/or customise the PAYG Marketing Material to suit the specific needs of the Operators' or each Operator's business or services.

4. Marketing Co-operation.

- (a) Subject to the provisions of Clause 7.2 of the Agreement, each of the Operators and TTL will cooperate in the promotion of PAYG.
- (b) TTL and the Operators, or each Operator as may be applicable, agree to provide each other with copies of their promotional material relating to the subject matter of this Agreement. Where promotional materials contain significant innovations or may impact on another Party's operations or commercial interests, copies of the promotional materials will be supplied at least 14 calendar days prior to the material needing to be finalised. The recipient Party may then notify the originating Party of any material objection to the promotional material on the grounds that:
 - i) it may bring PAYG into disrepute;
 - ii) it is factually inaccurate;
 - iii) it contains a misrepresentation of PAYG; or
 - iv) it may be detrimental to the reputation or business of TTL or the Operator(s) (as applicable).

The originating Party agrees to give due consideration to any objections on these grounds by the receiving Party and to address these objections in so far as this is reasonable and practicable. For the avoidance of doubt, it is not necessary for the originating party to submit the promotional material to the recipient Party when it wishes to re-use that promotional material during the term of this Agreement, where such promotional material has already been through the approval process in this Schedule 10.

5. Intellectual Property Rights.

- (a) Any and all Intellectual Property Rights subsisting in the PAYG Marketing Material, and any and all other materials produced by or at the request of a Party (including but not limited to such Party's rights in literature, posters and/or maps and, specifically, TTL's rights in the Journey Planner Map, London Connections Map, Travelcard Zone Map and London and South East Map) that are vested in that Party shall remain the exclusive property of such Party.
- (b) Each Party grants to the other Parties a royalty free, non-exclusive, non-transferable licence to use that Party's own Intellectual Property Rights contained in the PAYG Marketing Material in accordance with this Agreement and any additional provisions that the licensing Party may reasonably require for the protection of its rights in the PAYG Marketing Material and as may be notified to the other Parties from time to time.
- (c) Each Party shall: -
 - (i) notify the other of any third party Intellectual Property Rights comprised in the PAYG Marketing Material and the extent to which a third party licence is required and/or has been obtained in respect of them; and
 - (ii) use reasonable endeavours to procure for the other Parties a royalty free licence to use any such third party Intellectual Property Rights licensed to such Party contained in the PAYG Marketing Material.
- (d) If such Party cannot obtain a royalty free licence from such third party then such Party will, at its discretion: -
 - (i) be responsible for the costs of obtaining the necessary licence for the other Parties; or
 - (ii) remove the material to which such third party Intellectual Property Rights attach from the PAYG Marketing Material.
- (e) If, notwithstanding paragraph 5(d), any required third party licences are not granted, then the material to which such Intellectual Property Rights attach will be automatically deemed removed from the PAYG Marketing Material with immediate effect.
- (f) When a Party requests an addition or amendment to the PAYG Marketing Material the provisions of paragraphs 5(b) - 5(e) (inclusive) will apply to any Intellectual Property Rights requested to be added to the PAYG Marketing Material.
- (g) Where a Party is unable to obtain any applicable third party licences under paragraphs 5(c) or 5(d), such Party will: -
 - (i) if and to the extent that it failed to comply with its obligations under paragraph 5(c)(i) to notify the other Parties of the fact that the required licence had not been obtained, indemnify the other Parties for any costs and losses they may incur as a result of any successful claim resulting from infringement of the third party's Intellectual

Property Rights by use of the PAYG Marketing Material by the other Parties prior to the removal from the PAYG Material of the material to which such third party Intellectual Property Rights attach; and

- (ii) otherwise have no liability to any other Party arising from such failure to obtain a licence.

SCHEDULE 11

Expert Determination

1. The Expert will make a final and binding determination (save in the case of manifest error).
2. The Expert will be agreed by the Disputing Parties within 7 days of a written request by one party to the other party. In the absence of agreement, the Expert will be appointed by the President or appropriate officer from time to time of the Law Society.
3. Upon confirmation of the identity of the Expert, the Expert will obtain clarification from the Disputing Parties of the subject matter of the dispute and the issue or issues he is required to determine.
4. The Expert will in his absolute discretion decide the procedure to be adopted to determine the dispute and the timetable for the same.
5. The Expert will have the power to conduct such surveys, tests and/or investigations as he reasonably believes appropriate or to request further information or submissions from the Disputing Parties.
6. The Expert will make his determination in writing to the Disputing Parties giving reasons for his determination. In so doing, he will act as an expert and not as an arbitrator, limiting himself to the issues referred to him and using his professional expertise and experience to make his determination. The provisions of the Arbitration Act 1996 (or any subsequent modification or replacement of that Act) will not apply.
7. The Expert may on his own initiative or at the written request of either of the Disputing Parties, correct any clerical mistake, error or ambiguity within his determination provided that the initiative is taken or the request is made within 3 days of the notification of his determination to the parties. The Expert will make his corrections within 3 days of any such request.
8. The Expert will have the power to determine liability for the costs of the determination, including his fees and any test, investigations or surveys carried out, but excluding legal or other professional costs incurred by the Disputing Parties, in such proportions as he sees fit. The Expert will also have the power to award interest on any sums due at such rates and for such periods as he sees fit.

SCHEDULE 12

The Operators

Name Of Operator	Implementation Agreement required (Clause 2.1(e)) - Yes/No	Services Agreement required (Clause 2.1(e)) - Yes/No
c2c Rail Limited (registered number 02938993) whose registered office is at 7 Triton Square, London NW1 3HG	No	Yes
The Chiltern Railway Company Limited (registered number 03007939) whose registered office is at Great Central House, Marylebone Station, Melcombe Place, London, NW1 6JJ	No	Yes
First Capital Connect Limited (registered number 05281077) whose registered office is at 50 Eastbourne Terrace, Paddington, London W2 6LX	Yes	Yes
First Greater Western Limited (registered number 05113733) whose registered office is at Milford House, 1 Milford Street, Swindon, Wiltshire SN1 1HL	No	Yes
London & Birmingham Railway Limited (registered number 05814584) whose registered office is at 3rd Floor 41-51 Grey Street Newcastle upon Tyne, Tyne & Wear, NE1 6EE	Yes	Yes
London Eastern Railway Limited (registered number 04955356) whose registered office is at 7 Triton Square, London NW1 3HG	Yes	Yes
London & South Eastern Railway Limited (registered number		

04860660) whose registered office is at 3rd Floor, 41-51 Grey Street, Newcastle Upon Tyne, NE1 6EE	Yes	Yes
Southern Railway Limited (registered number 06574965) whose registered office is at 3rd Floor, 41-51 Grey Street, Newcastle Upon Tyne, NE1 6EE	Yes	Yes
Stagecoach South Western Trains Limited (registered number 05599788) whose registered office is at Friars Bridge Court, 41-45 Blackfriars Road, London SE1 8NZ	Yes	Yes

SCHEDULE 13

Launch Management Process

1. Application of Schedule

- 1.1 The provisions of this Schedule 13 apply as between TTL and those Operators who are a Party to this Agreement at the signature date or who become a Party to this Agreement prior to the applicable Anticipated PAYG Launch Date. For the avoidance of doubt a Required Change as set out in Schedule 9 (Change Control Procedure) shall not apply to this Schedule 13 or to any testing, acceptance process or plan agreed pursuant to this Schedule.

2. Process

- 2.1 The Parties shall co-operate in managing the process to achieve PAYG Launch on the Operators' Services through the Programme Management Group as defined in Schedule 19. It is acknowledged that the Implementation Agreements envisage that TTL may present information to the Parties relating to progress under the Implementation Agreements from time to time.

- 2.2 To enable PAYG Launch to be achieved the Parties have agreed prior to the date of this Agreement:

- (a) an Integrated Programme Plan ("Integrated Programme Plan"), defining all the activities necessary for PAYG Launch on the then Anticipated PAYG Launch Date, including a Launch Commitment Date relevant to the then Anticipated PAYG Launch Date. For this purpose, Launch Commitment Date shall mean the date agreed by the Parties on or before which they shall determine, pursuant to paragraph 3 of this Schedule, whether to commit to PAYG Launch on the Anticipated PAYG Launch Date. The key milestone dates in the Integrated Programme Plan as at the date of this Agreement are shown in Appendix 1 of this Schedule ("Key Milestone Plan"). The Key Milestone Plan specifies which key milestone dates (if any) shall not be changed without the agreement of the Parties and which key milestone dates (if any) can be changed by a Party without agreement of the other Parties. For the avoidance of doubt, changing a date under the Key Milestone Plan does not alter any of the other obligations required to be carried out under this Agreement.

and the Parties shall, acting reasonably, agree:

- (b) a detailed launch and reversal plan, to be agreed on or before the date shown as the 'Launch Strategy' in the Key Milestone Plan that further defines the conditions necessary for PAYG Launch; the potential Critical Failures that may prevent PAYG Launch; the processes for managing such Critical Failures; and, if necessary, to reverse the decision to launch;

(c) a test plan, to be agreed on or before the date shown in the Key Milestone Plan (to be known by the Parties as the 'Master Test Plan'). The test plan shall comprise three stages of testing namely laboratory testing, production environment testing for individual system modules, and integrated production environment testing. For the avoidance of doubt the test plan shall demonstrate that testing will be sufficiently comprehensive and thorough to provide assurance to the Operators that the obligations in Clause 8.1 (c) and (d) are met and shall include:

- (i) sufficient detail to demonstrate that:
 - (1) all PAYG System features described in Schedule 2 of this Agreement function correctly for all combinations of journey start and end points and ticket types, and has been demonstrated to do so using a representative sample of Operator station journey combinations; and
 - (2) accurate data can be extracted from the central system within the PAYG System and transferred in accordance with Schedule 7 of this Agreement and the Amended Clearance Agreement;
- (ii) a definition of the testing modules (being the system components into which the PAYG System shall be divided for testing purposes);
- (iii) a definition of the steps within each stage of testing, the types of test to be applied and the procedures to be used;
- (iv) a definition of the scope of test coverage, specifying any specific inclusions and exclusions, in order to provide assurance that the scale of testing is both adequate and sufficient;
- (v) a specification of where and how regression testing will be conducted and the conditions that regression testing must satisfy;
- (vi) the elapsed time required for each stage of testing and provide an outline testing timetable;
- (vii) a definition of the criteria to be satisfied before completion of each stage of testing and that need to be satisfied before proceeding to the next stage of testing; and
- (viii) an assignment of specific roles and responsibilities to individuals or organisations for test stages and steps.

2.3 In the event of failure to agree on any of the items described in paragraph 2.2 (b) or (c), by the dates referred to therein, then:

- (a) without prejudice to the respective rights and liabilities of any Party in respect of any breach by a Party of its obligations under this Agreement, a Services Agreement or an Implementation Agreement (as applicable), the Parties shall be relieved of their respective obligations in paragraphs 2.5 and 2.6 until such time as the dispute is resolved. The Parties shall use their reasonable

endeavours to minimise delays in the areas unaffected by the failure to agree; and

- (b) at such time as the failure to agree has been resolved the Parties acting reasonably shall agree a revision to the Key Milestone Plan to reflect the impact of any delay.

2.4 In the event that the results of the laboratory testing for any module do not satisfy the criteria defined in the test plan for that module, pursuant to paragraph 2.2(c)vii above then the testing of that module shall not proceed to the next stage of testing, nor shall the stage of testing for that module be deemed complete, until the criteria are met.

In the event that the results of the production environment module testing stage do not satisfy the criteria defined in the test plan for any module pursuant to paragraph 2.2(c)vii above then the integrated production environment testing stage shall not proceed until the criteria are met.

Notwithstanding the above TTL shall have the right to continue with testing, at its own risk, on its own network ("Unofficial Testing"), provided that:

- (a) the Operators shall not be required to take part in the Unofficial Testing or provide testing resources as defined in paragraph 2.6(d) below;
- (b) none of the Unofficial Testing will take place on the Operator Stations without the prior written permission of the Operator in question;
- (c) there is no impact on Operators already accepting PAYG on their network under Existing PAYG Acceptance Arrangements;
- (d) there is no impact on passengers using PAYG;
- (e) those Operator Stations that do not already accept PAYG will not be enabled for the acceptance of PAYG by passengers pursuant to or as a result of the Unofficial Testing; and
- (f) there is no impact on any of the Operators other systems and ticketing products

providing always that the TTL indemnity in Clause 16.1 (f) shall apply if TTL is in breach of its obligations under paragraphs 2.4 (b) - (f) above.

For the avoidance of doubt Unofficial Testing shall not constitute testing in accordance with the test plan unless expressly agreed by the Parties and nothing in this paragraph 2.4 shall relieve TTL from its obligation to comply with the test plan.

2.5 Without limiting TTL's obligations (and without prejudice to the obligations of each of the Operators) under this Agreement, any Implementation Agreement and/or any Services Agreement, TTL shall:

- (a) be responsible for the overall co-ordination of the activities associated with achieving PAYG Launch on all of the Operators' Services;
- (b) take all such steps as are necessary to establish and demonstrate that TTL is, or will by the Required Date be, able to comply with those of its obligations pursuant to:

- (i) this Agreement (including Schedule 2);
 - (ii) the Implementation Agreements; and
 - (iii) the Services Agreements;
- as are required to achieve PAYG Launch.

- (c) by the Required Date provide training to Operators' trainers and provide the original training content directed at the Operators' trainers (to enable the Operators to provide the training referred to in paragraph 2.6 (c)). The Parties shall act reasonably in agreeing the numbers of Operator trainers to be trained, training content and programme;
- (d) by the Required Date provide such training and communications to its own staff as is necessary in order to comply with its obligations under this Agreement and the Services Agreement in so far as is required to achieve PAYG Launch;
- (e) by the Required Date amend existing public communications material (primarily TTL Group websites and leaflets) to take account of the PAYG Launch;
- (f) be responsible for ensuring that there is by the Required Date an adequate supply of TTL Smartmedia (which as at the date of signature of this Agreement are anticipated to be in the form of cards) available to meet the reasonably anticipated additional demand generated by the PAYG Launch on the Operators' Services;
- (g) provide by the Required Date adequate staff and associated resources for testing sufficient to carry out management of testing, analysis of results, and the conduct of laboratory testing, module testing in a production environment, and integrated testing in a production environment, of the PAYG Equipment and the other aspects of the PAYG System to meet the requirements specified in any test plan agreed in accordance with paragraph 2.2(c) and/or Clause 8.1;
- (h) by the Required Date, appoint and notify ATOC of the suitably qualified individuals responsible for achieving PAYG Launch on behalf of TTL, and notify any changes to such individuals to ATOC from time to time; and
- (i) for those Operator Stations where PAYG Launch is to occur, confirm by the Required Date that following activation in preparation for PAYG Launch, each Validator and Gate Reader has communicated with an item of TTL Smartmedia, and sent a transaction to the PAYG System. For the avoidance of doubt, these on-station checks may be done using TTL staff, TTL's subcontractors, Operator staff at the relevant Operator Station, or other Operator testers (in all cases co-ordinated by TTL).

2.6 Without limiting each Operator's obligations (and without prejudice to the obligations of TTL) under this Agreement, the Operator's Implementation Agreement (if any) and/or the Operator's Services Agreement, each Operator will:

- (a) by the Required Date provide sufficient hand held readers with the appropriate software in order to meet its obligations in sufficient time to allow for them to be supplied, tested and staff trained in the use of them. For these purposes, sufficient means sufficient to meet the anticipated demand in a manner compliant with the Operator's obligations under the PAYG Operating Requirements;
- (b) take all such steps as are necessary to establish and demonstrate that it is, or will by the Required Date be, able to comply with those of its obligations under:
 - (i) this Agreement;
 - (ii) its Implementation Agreement; and
 - (iii) its Services Agreement;
 as are required to achieve PAYG Launch;
- (c) by the Required Date provide such communications and training of its own staff in appropriate business processes as is necessary in order to comply with its obligations under this Agreement and the Services Agreement in so far as is required to achieve PAYG Launch;
- (d) by the Required Date provide staff and associated resources, as defined in the test plan sufficient for contributing to the development of the test plan, witnessing of the laboratory testing, and participation in the module testing in a production environment, and in integrated testing in a production environment of the PAYG Equipment and relevant aspects of the PAYG System at each of the Operator's stations) in accordance with any test plan agreed in accordance with paragraph 2.2(c);
- (e) by the Required Date develop and implement a public launch communications plan;
- (f) by the Required Date, appoint and notify TTL of the suitably qualified individuals responsible for achieving PAYG Launch on behalf of the Operators, and notify any changes to such individuals to TTL from time to time;
- (g) ensure that any changes to the Operator's non- PAYG fares which are required by or as a consequence of this Agreement are implemented at the same time as PAYG Launch;
- (h) ensure that required information about those PAYG fares to apply from the PAYG Launch Date which the Operators' are responsible for setting will be provided within the following timescales (consistent with paragraph 2 and the table of Notice Periods set out in the introduction of Schedule 3):-
 - 98 days prior to the Anticipated PAYG Launch Date - initial notification of all PAYG fare values;
 - 60 days prior to the Anticipated PAYG Launch Date - PAYG fare values confirmed; and
- (i) co-operate with TTL to undertake the station checks made pursuant to paragraph 2.5 (i).

- 2.7 Each Party will in accordance with any process they agree for this purpose; and/or as and when reasonably requested by another Party provide evidence that it has complied with any relevant obligation as is referred to in paragraph 2.5 or 2.6 (as applicable) or that such obligation can be achieved by the Required Date.
- 2.8 The Parties acknowledge that in order to achieve PAYG Launch it may be necessary for TTL or its sub-contractors to carry out work on the Operator's gate lines, and that: -
- (a) TTL will use all reasonable endeavours to carry out that work in a way which minimises disruption to the Operators, including by seeking to carry out the work where possible during off-peak operating hours (where for the purposes of this paragraph 2.8, peak means 06:30 - 09:30 and 16:00 to 19:00 weekdays);
 - (b) the Operators must act reasonably in agreeing access to their gate lines for this purpose, including where (despite TTL's reasonable endeavours) such access is required during peak operating hours; and
 - (c) nothing in this paragraph 2.8 will release TTL from its obligations under Clause 16.1 (g).

3. The Launch Decision

3.1 PAYG Launch:

- (a) requires the written agreement of both TTL and ATOC such agreement not to be unreasonably withheld or delayed; and
- (b) requires that as a minimum the following have been achieved:
 - (i) the Key Features set out in Schedule 2 have been achieved or that TTL has provided an alternative appropriate workaround solution acceptable to the Operators;
 - (ii) that the PAYG Equipment and PAYG System have passed acceptance in accordance with the test plan agreed in accordance with paragraph 2.2(c) or that TTL has provided an alternative appropriate workaround solution acceptable to the Operators;
 - (iii) that the PAYG Fares as defined in Schedule 3 will be effective on Operators' Services from the PAYG Launch Date;
 - (iv) TTL's capability to provide the form and content of information required to be provided by TTL to RSP pursuant to Schedule 7 and in accordance with the Amended Clearance Agreement has been demonstrated by passing the tests for this set out in the test plan agreed in accordance with paragraph 2.2(c);

- (v) all London Terminals are capable of accepting PAYG which includes having in place the requirements set out in Schedule 5; and
- (vi) all other obligations on the Parties required under this Agreement to be completed before PAYG Launch are completed.

For the avoidance of doubt the inability of RSP to undertake settlement shall not be grounds for the Operators withholding or delaying agreement to PAYG Launch, except where such inability is a consequence of a breach of this Agreement by TTL.

3.2 Without prejudice to paragraph 4, on or before the Launch Commitment Date:-

- (a) either ATOC or TTL may decide and notify the other in writing that PAYG Launch is not to proceed on the then Anticipated PAYG Launch Date;
- (b) any such notice shall be on the basis that:-
 - (i) the requirements in paragraphs 3.1(a) and 3.1(b) have not been met by the Launch Commitment Date; and
 - (ii) the Party on whose behalf the notice is served believes, acting reasonably that the requirements set out in paragraphs 3.1(a) and (b), will not be achieved by the Anticipated PAYG Launch Date.

3.3 Notwithstanding the other provisions of this Schedule 13, TTL and ATOC may agree to:

- (a) commit to PAYG Launch on the then Anticipated PAYG Launch Date in respect of all Operators even if not all of the Parties' obligations have been or will be fulfilled by the Required Date (except that for the avoidance of doubt nothing in this paragraph 3.3 (a) will entitle TTL to force an individual Operator to commit to accept PAYG as a means of payment for travel on the then Anticipated PAYG Launch Date where TTL's or such Operator's obligations will not be fulfilled by the Required Date); and/or
- (b) commit to PAYG Launch on the then Anticipated PAYG Launch Date, even if not every Operator will accept PAYG as a means of payment or accept PAYG at all of its Operator Stations from that date

in each case on the basis of such arrangements as they may agree, which will include

- (i) the necessary arrangements to be put in place to determine the date and basis on which any Operator, who is not to accept PAYG as a means of payment on the same date as the other Operators, will subsequently do so; and

- (ii) confirmation of the application of the indemnity in Clause 16.1 to those Operators accepting PAYG under this paragraph from the date of any such PAYG Launch.

3.4 If and as soon as TTL or any Operator becomes aware that it is unable to meet one or more of its obligations under this Agreement or the relevant Implementation Agreement within the timescales required to achieve the then Anticipated PAYG Launch Date, it shall serve notice on the other Parties, such notice to:

- (a) contain an estimation of the implications of the delay on the current Anticipated PAYG Launch Date; and
- (b) set out the timescale in which it anticipates the obligation or obligations will be met.

On receipt of such notice either of TTL and ATOC shall acting reasonably decide whether or not to postpone the Anticipated PAYG Launch Date. If no such decision is agreed in writing between TTL and ATOC then the Anticipated PAYG Launch Date shall then be revised to the next fares revision date. In these circumstances the Parties shall use all reasonable endeavours to minimise the delay in the Anticipated PAYG Launch Date and rectify the cause of the delay.

3.5 This paragraph 3 and in particular, any change to a key milestone date in the Key Milestone Plan which has the effect of changing a Required Date shall be without prejudice to any Party's rights and liabilities under this Agreement or the relevant Implementation Agreement in respect of any breach by a Party of this Agreement or an Implementation Agreement.

3.6 If any Party wishes to propose at any time a change to a key milestone date set out in the Key Milestone Plan, it shall give notice to that effect to the other Parties and the Parties shall review the implications thereof.

3.7 Without limiting paragraph 3.6, the Parties:-

- (a) acknowledge that:-
 - (i) although the Anticipated PAYG Launch Date as at signature of this Agreement is 2nd January 2010, there may be scope for the Parties to accelerate PAYG Launch and achieve an earlier PAYG Launch Date, to occur between 6th September 2009 and the stated Anticipated PAYG Launch Date;
 - (ii) PAYG Launch on a date other than a recognised fares revision date may involve the Parties implementing an interim fares revision (which the Parties acknowledge may not be desirable);
- (b) agree to work together in good faith to identify and agree the scope for acceleration and how that could be achieved.

4. **Actions following a decision to commit to PAYG Launch**

- 4.1 It is acknowledged that any decision to commit to PAYG Launch on some or all of the Operators' Services will be on the basis that a subsequent decision may be made to reverse the decision if a Critical Failure is identified by any Party in respect of the arrangements required to be in place at the then Anticipated PAYG Launch Date. In the event that there is a Critical Failure then the Anticipated PAYG Launch Date may be delayed in accordance with the process set out below:
- (a) the Parties will review progress and issues arising following any decision to commit to launch PAYG in respect of some or all Operators;
 - (b) each Party will immediately notify the others of any Critical Failure of which it becomes aware; and
 - (c) either TTL or ATOC may invoke the reversal strategy if it reasonably considers a Critical Failure has arisen for which no appropriate remedial action can be implemented in order to enable PAYG Launch on the relevant Operators' Services by the then Anticipated PAYG Launch Date.
- 4.2 Subject to paragraph 4.3, if there has been a decision not to commit to PAYG Launch pursuant to paragraph 3.2 or to invoke a reversal strategy then, unless otherwise agreed by the Parties:
- (a) the Anticipated PAYG Launch Date shall then be revised to the next fares revision date; and
 - (b) the provisions of this Schedule shall continue to apply mutatis mutandis in respect of that revised Anticipated PAYG Launch Date.
- 4.3 If the Operator Launch Date is not achieved in respect of all Operators in accordance with the terms of this Schedule by the fares revision date in January 2011 (the "Long Stop Date"):
- (a) TTL shall have the right by notice in writing to terminate the PAYG Agreement in respect of any Operator or all the Operators in total;
 - (b) any Operator shall have the right by notice in writing to terminate the PAYG Agreement in respect of that Operator; and
 - (c) ATOC shall have the right on behalf of all Operators by notice in writing to terminate the PAYG Agreement in total.
- 4.4 If the Parties have identified that the PAYG System will or may not comply with the relevant requirements under this Agreement by the Long Stop Date, but nevertheless agree to go ahead with PAYG Launch by the Long Stop Date on the proviso that the applicable non compliance will be remedied after PAYG Launch:
- (a) the Parties shall agree as part of such arrangement the time period ("the remedy period") within which such non-compliance is required to be remedied after PAYG Launch; and

- (b) if the non-compliance has not been remedied within the remedy period determined pursuant to paragraph 4.4 (a), then ATOC shall be entitled, by giving 9 months prior written notice to TTL served within 1 month after expiry of the remedy period, to terminate the Agreement in total, on behalf of all the Operators.
- 5. **Liability in respect of termination pursuant to paragraph 4, and otherwise associated with PAYG Launch and/or the period prior to Operator Launch in respect of all Operators**
- 5.1 No Party shall be liable to another in respect of any delay in the PAYG Launch Date or any Operator Launch Date if Operator Launch is achieved in respect of all Operators by the Long Stop Date.
- 5.2 Where:-
 - (1) this Agreement is terminated in its entirety pursuant to paragraph 4.3 or 4.4; and
 - (2) the failure to achieve Operator Launch by the Long Stop Date (or to remedy any non compliance with the requirements for PAYG Launch within the remedy period described in paragraph 4.4(a)) is not caused (in whole or in part) by any breach by a Party of its obligations under any of this Agreement, an Implementation Agreement or a Service Agreement, then:-
 - (a) subject to Clause 18.5, each Party will bear its own costs in respect of performance of its obligations prior to the date of termination and will have no liability to any other for any costs losses or damages whatsoever, however caused arising out of the failure or such termination. Subject to paragraph (b) below this includes, in the case of each Operator, all the Communications Costs in respect of that Operator;
 - (b) each of TTL and the Operator shall be responsible for 50% of the aggregate Shared Risk Communication Costs paid and payable up to and/or as a consequence of such termination of this Agreement. Upon agreement or determination of the total amount of the Shared Risk Communication Costs for that Operator, a reconciliation payment shall be due and payable (taking into account any amounts already paid by the Operator in respect of the same) within 30 days of invoice delivered by the Party entitled to receive the reconciliation payment; and
 - (c) in the case of Phase 1 Operators, paragraph 5.2(2)(b) shall not apply in respect of the Shared Risk Communication Costs falling within sub paragraph (a) of that definition, such that the Phase 1 Operators will be responsible for all such costs.
- 5.3 Where:-
 - (1) this Agreement is terminated in its entirety pursuant to paragraph 4.3 or 4.4; and
 - (2) to the extent the failure to achieve Operator Launch in respect of all Operators by the Long Stop Date (or to remedy any non

compliance with the requirements for PAYG Launch within the remedy period described in paragraph 4.4(a)) is caused by any breach by a Party of its obligations under any of this Agreement, an Implementation Agreement or a Service Agreement, then:

- (a) subject to paragraphs 5.3(b), 5.4 and to paragraph 5.7, each other Party shall be entitled to claim damages in respect of costs claims liabilities and expenses incurred by it prior to the date of termination in performance of its obligations under this Agreement, any Implementation Agreement and/or any Service Agreement (including without limitation Communication Costs paid and payable by it); and
 - (b) in the case where a Phase 1 Operator is the party entitled to claim pursuant to paragraph 5.3 (2)(a) the Operator will not be entitled to recovery in respect of payments of the TTL Charges (including any Communication Charges) incurred up to the time of termination.
- 5.4 Without limiting paragraph 5.3 (2) (a), no Party shall have any liability to another in respect of any actual or anticipated loss of profit, revenue or anticipated savings foregone as a consequence of failure to achieve or delay in achieving PAYG Launch or Operator Launch or of any termination pursuant to paragraph 4.3 or 4.4.
- 5.5 Where this Agreement is terminated in respect of one or more individual Operators (but not in its entirety) pursuant to paragraph 4.3, then the provisions of paragraph 5.2, 5.3 and 5.4 shall apply only as between TTL and the relevant Operator(s).
- 5.6 For the purposes of determining TTL's liability for the purposes of this paragraph 5 only, TTL's obligations under Clause 8.1 (a) of the Agreement will be, subject to paragraph (i) of the introduction to Schedule 2, deemed to be an obligation to ensure that the PAYG System will support and enable the items, functions and facilities described in paragraphs 1, 2 and (to the extent provided therein) 3 of Schedule 2 by no later than the Long Stop Date.
- 5.7 Subject to paragraph 5.8, in no circumstances shall:
- (a) TTL's total liability to the Operators as a group: -
 - (i) in respect of any breach or breaches by TTL referred to in paragraph 5.3(2); or
 - (ii) otherwise under or in respect of this Agreement, any Implementation Agreement and/or any Services Agreement however arising in respect of the period prior to the PAYG Launch Dateexceed £5 million in aggregate;
 - (b) TTL be entitled to recover more than £5 million in aggregate from the Operators as a group: -

- (i) in respect of any breach or breaches by any Operator(s) referred to in paragraph 5.3(2); or
- (ii) otherwise under or in respect of this Agreement, any Implementation Agreement and/or any Services Agreement however arising in respect of the period prior to the PAYG Launch Date

provided that nothing in this paragraph 5.7(b) shall: -

- (1) entitle TTL to claim against one Operator in respect of any breach by another; or
- (2) limit the amount which TTL can claim against any one Operator, subject to the £5m aggregate limit not being exceeded;

5.8 No Party excludes or limits its liability pursuant to paragraph 5.7:

- (a) for personal injury or death resulting from its negligence;
- (b) for any liability arising under Clauses 6.1, 6.2, 6.3(c)(v), 6.4 and 6.5 or Schedule 10 paragraph 5(g)(i), including as such clauses apply in the Services Agreement and the Implementation Agreement;
- (c) for any liability arising under Clause 24 (Confidentiality), or Clause 15 of the Services Agreement or any equivalent Clause relating to confidentiality in the Implementation Agreement;
- (d) for any liability arising under Clause 32 (Protection of Personal Data) or Clause 16 of the Services Agreement or any equivalent Clause relating to data protection in the Implementation Agreement;
- (e) for any matter for which it would be illegal to exclude or limit or to attempt to exclude or limit its liability;
- (f) for fraud by it or any of its employees agents or subcontractors;
- (g) for breach of an obligation to make a payment of charges or payments of any kind accrued under this Agreement, its Services Agreement, or its Implementation Agreement (as applicable) except and to the extent that paragraph 5.3 applies ;
- (h) in respect of all and any loss of or damage to tangible property (whether such tangible property belongs to another Party or a third party) including without limitation the PAYG Equipment; or
- (i) in the case of the Operators, in respect of all and any loss arising from the misappropriation or alienation of the PAYG

Equipment (which includes, without limitation, any breach of Schedule 14).

SCHEDULE 13

APPENDIX 1

Key Milestone Plan

Milestones	
Test Strategy agreed*	05-Nov-08
TranSys RSP output file ready	13-Feb-09
Factory Testing complete	27-Feb-09
Software deployed and Live Testing Starts	02-Mar-09
TOC PAYG Operational Requirements complete	28-May-09
Communications Installation Mid Point	06-Aug-09
Test Plan agreed*	26-Aug-09
TTL Staff Training complete	28-Aug-09
PAYG customer and staff comms planning complete	24-Sep-09
FCC Hardware and Data Comms complete	29-Sep-09
Integrated Production Environment Testing complete	02-Oct-09
NXEA Hardware and Data Comms complete	07-Oct-09
Southern Hardware and Data Comms complete	15-Oct-09
Launch Strategy agreed*	20-Oct-09
Launch Commitment Date*	23-Oct-09
Operators Cash Fares Load (PD1)	30-Oct-09
Southeastern Hardware and Data Comms complete	06-Nov-09
SSW Hardware and Data Comms complete	10-Nov-09
TTL Helpdesk Ready	10-Nov-09
Operators PAYG Fares Load	11-Nov-09
Waterloo Commissioning Complete	05-Dec-09
Control Centre Ready	01-Dec-09
TranSys RSP output file Tested and accepted	11-Dec-09
Operator Staff Trained	21-Dec-09
Anticipated PAYG Launch Date*	02-Jan-10

* Note - these dates cannot be changed except with agreement of all Parties pursuant to paragraph 2.2 (a) above.

SCHEDULE 14

PAYG Equipment

1. Unless agreed otherwise TTL shall be responsible for the provision of all PAYG Equipment required to operate PAYG in accordance with this Agreement. Such provision shall be at each Operator's own cost, except in the circumstances as set out in paragraph 10.
2. If any PAYG Equipment has been provided to an Operator pursuant to an Implementation Agreement, or any other arrangement prior to this Agreement (whether written or otherwise, and whether between TTL and the Operator or TTL and a third party) then subject to:-
 - (a) any future agreement between the Parties relating to the provision of further or different PAYG Equipment; and
 - (b) TTL's obligations in respect of the Services Agreement

TTL's obligation under paragraph 1 shall be deemed to have been complied with.
3. Unless otherwise agreed by TTL and the relevant Operator, as between TTL and each Operator, all PAYG Equipment shall be owned by TTL.
4. If for any reason ownership in any PAYG Equipment does not automatically vest in TTL then, except as otherwise agreed or set out otherwise in any other agreement between TTL and the applicable Operator (which agreement has not been superseded by this Agreement), the applicable Operator will promptly transfer or procure the transfer of ownership to TTL. For the period up to such transfer, the applicable Operator will hold the PAYG Equipment on trust for TTL and TTL shall be the beneficial owner of the PAYG Equipment.
5. Notwithstanding the generality of paragraph 3, each Operator acknowledges that the PAYG Equipment is TTL's or its subcontractor's or nominated third party's property and that the Operator has no rights to such PAYG Equipment other than as set out under the terms and conditions of this Agreement. No Operator shall do or permit or cause anything to be done whereby TTL's or its subcontractor's or nominated third party's rights in and title to the PAYG Equipment are or may become prejudiced.
6. Without limiting paragraphs 3, 4 and 5, the Operators shall not sell, offer to sell, assign, underlet, pledge, mortgage, charge, encumber or part with possession of or otherwise deal with the PAYG Equipment or any interest in it nor create or allow to be created any lien over the PAYG Equipment, whether for repairs or otherwise.
7. Each Operator agrees that the PAYG Equipment may be sited on its applicable Operator Stations and hereby grants to TTL all necessary licence, rights and permissions for that purpose and the purposes of this Agreement and that Operator's Implementation Agreement (if any) and Services Agreement.

8. Each Operator shall ensure that the PAYG Equipment does not at any time become a fixture at the applicable Operator Station where it is installed.
9. Notwithstanding any other provision of this Schedule 14 :-
 - (a) PAYG Equipment shall be at the Operator's risk with effect from its installation at any Operator Station;
 - (b) the Operator shall exercise all reasonable skill and care in safeguarding the PAYG Equipment; and
 - (c) the Operator shall be responsible for any direct costs, losses and damages (not including loss of revenue) arising from loss of or damage to the PAYG Equipment after its installation to the Operator Station except where the loss or damage is attributable to any breach or negligence by TTL or its authorised subcontractors in carrying out their obligations under this Agreement, the Implementation Agreement or the Services Agreement.
10. In the following circumstances only, and subject always to Schedule 4 Part III of this Agreement, the costs for the provision of the PAYG Equipment shall be borne by TTL :-
 - (a) where the PAYG Equipment is provided in accordance with an Implementation Agreement entered into on or before the date of this Agreement and in contemplation of it;
 - (b) where the PAYG Equipment is required at a Joint Station;
 - (c) to the extent provided for in accordance with Schedule 9 (the Change Control Procedure) where the PAYG Equipment is introduced as a TTL Required Change; or
 - (d) where the Parties have so agreedand in the case of (a), (b) and (c) above, where the relevant PAYG Equipment is required to be replaced as part of any performance assurance programme.
11. For the avoidance of doubt, where the Operator is responsible for the costs of the provision of PAYG Equipment and/or the costs associated with altering the layout and/or quantities of PAYG Equipment ("Alteration Services") :-
 - (a) the Parties anticipate that TTL will be procuring the capability to provide that PAYG Equipment and those Alteration Services as part of its overall procurement and provision of the TTL Services and PAYG System; and
 - (b) accordingly, TTL confirms that the provisions of Part III of Schedule 4 shall apply (mutatis mutandis) to the procurement and provision of such PAYG Equipment and Alteration Services as if the same were TTL Services.

12. Performance of Ticketing Gates at Operator Stations
- (a) Each Operator agrees and acknowledges that the maintenance of ticketing gates at its Operator Stations (excluding the Gate Reader installed in such ticketing gate) is the responsibility of that Operator (or its sub-contractor) and not TTL, and each Operator will ensure that the maintenance of the ticketing gates at its Operator Stations is up to date at all times in accordance with supplier's guidelines and otherwise in accordance with good industry practice.
 - (b) TTL will not be responsible to the Operator for:-
 - (i) the failure of any PAYG Equipment to perform in accordance with this Agreement, the Implementation Agreement (as applicable) or the relevant Services Agreement; or
 - (ii) any related delay, failing or error in the TTL Services or PAYG Systemto the extent such failure is caused, or contributed to, by the ticketing gates at the Operator Stations.
13. TTL will maintain an asset register of PAYG Equipment for each Operator Station, and will provide the relevant asset register to the relevant Operators upon reasonable request.
14. TTL will provide to ATOC:
- (a) a complete set of "as built" drawings in respect of the installation of PAYG Equipment at Operator Stations pursuant to Implementation Agreements entered into with Operators as at the date of this Agreement; and
 - (b) new or revised "as built" drawings following any change made by TTL in the layout or quantities of PAYG Equipment at any Operator Station during this Agreement (subject to TTL being reimbursed its costs for this where the change is one requested by the Operator in accordance with paragraph 4(b) of Schedule 9 (Change Control Procedure)
- within 6 months of the later of the signature of this Agreement, or completion of the installation of all the PAYG Equipment pursuant to the Implementation Agreements entered into with Operators as at the date of this Agreement.

SCHEDULE 15

Exit Plan

1. Disconnection from the PAYG System

Subject to paragraph 3 below, on termination of this Agreement, or cessation of the participation of an Operator from this Agreement, howsoever arising:-

- 1.1 TTL shall take such steps as are necessary to ensure that the PAYG Equipment of the relevant Operator(s) ceases to be capable of validating PAYG;
- 1.2 TTL may satisfy paragraph 1.1 in respect of Validators by requesting the Operator to disable such Validators at the Operator's Stations and the Operator shall comply with any such request, where the Operator is reasonably able to do so.

2. PAYG Equipment

Subject to paragraphs 3 and 4 below, on termination of this Agreement, or cessation of the participation of an Operator from this Agreement, howsoever arising:

2.1 Recovery of the PAYG Equipment

2.1.1 TTL shall be entitled to arrange for the recovery of the PAYG Equipment from the Operators or Operator (as applicable), and for this purpose TTL or its sub-contractors shall, upon giving reasonable prior notice to the relevant Operator, be entitled to enter into any premises occupied or under the control of that Operator to make such recovery. For the purposes of this Schedule 15 PAYG Equipment shall mean the PAYG Equipment:-

2.1.1.1 including, for the avoidance of doubt, casing and the pedestals on which validators are mounted; but

2.1.1.2 excluding power cabling, the containment for all cabling, and (unless TTL notifies an Operator to the contrary in any individual case) data cabling.

2.1.2 each of the Operators or the relevant Operator (as applicable) shall be entitled by notice to require TTL to recover the PAYG Equipment within a reasonable time in the following circumstances:-

2.1.2.1 where TTL has terminated this Agreement in accordance with Clause 18.2;

2.1.2.2 subject to the Secretary of State bearing TTL's costs in respect of such recovery, upon termination

of the entire Agreement in accordance with a notice received from the Secretary of State, pursuant to Clause 18.1 (d);

- 2.1.2.3 as regards any individual Operator, in any other circumstances of termination under this Agreement, where the Operator pays TTL's reasonable costs in respect of such recovery; and
 - 2.1.2.4 if this Agreement is terminated pursuant to Clause 18.1(b) where (subject to paragraph 2.2.1 below), the Operator pays TTL's reasonable costs of recovery.
 - 2.1.3 The Operators or Operator (as applicable) shall co-operate fully to enable TTL or its sub-contractors to recover the PAYG Equipment in accordance with this Agreement.
 - 2.1.4 TTL shall use all reasonable endeavours in the circumstances to minimise disruption to the relevant Operator, and to avoid any damage to an Operator's premises associated with the recovery of PAYG Equipment. In addition TTL shall use reasonable endeavours to reinstate the premises after removal of the PAYG Equipment provided that this shall be interpreted as leaving the premises in a good condition and shall not include an obligation to replace any item or feature removed in order to facilitate the installation of the PAYG Equipment or an obligation to match finishes in materials.
 - 2.1.5 If any of the PAYG Equipment at the time of the repossession by TTL has been altered by the Operator, except as permitted under this Agreement or as agreed between TTL and the Operator, or is not in good repair and condition (in breach of the Operator's obligations under this Agreement) then without prejudice to any other rights TTL may have, the Operator shall reimburse TTL for the lower of the cost of repairing or replacing the relevant PAYG Equipment.
- 2.2 Costs associated with the recovery of the PAYG Equipment
- 2.2.1 If this Agreement is terminated pursuant to Clause 18.1(b):
 - 2.2.1.1 if the failure to achieve PAYG Launch by the Long Stop Date is not caused (in whole or in part) by any breach by a Party of its obligations under any of this Agreement, an Implementation Agreement or a Services Agreement, then each Party shall bear its own costs in connection with the recovery including (in the case of TTL) the cost of arranging the removal of the PAYG Equipment and the cost of making reinstatement (as described in Clause 2.1.4). Where an Operator requests TTL to recover the PAYG Equipment pursuant to paragraph 2.1.2.4 in these circumstances, the Operator shall bear TTL's reasonable costs of such

recovery as if these costs were the Operator's costs.

2.2.1.2 if and to the extent the failure to PAYG Launch by the Long Stop Date is caused by a breach by a Party of its obligations under any of this Agreement, an Implementation Agreement or a Services Agreement, then the amount which each other Party shall be entitled to claim pursuant to paragraph 5 of Schedule 13 shall include its costs incurred in connection with the recovery of the PAYG Equipment (including in the case of the Operator, any costs otherwise payable by it pursuant to paragraph 2.1.2.4) and the cost of making reinstatement and making good the premises (as applicable), subject always to the limit of liability in paragraph 5 of Schedule 13.

2.2.2 if the Agreement is terminated in any other circumstances, the provisions of paragraph 2.2.1.1 shall apply save as provided in paragraph 2.1.2.2 or 2.1.2.3

3. Paragraphs 1, 2 and 5 of this Schedule 15 shall not apply where and to the extent that:

3.1 this Agreement is terminated only in relation to an Operator (in this paragraph "the Outgoing Operator"); and

3.2 the Outgoing Operator is immediately replaced as signatory to this Agreement by one or more Successor Operators who enter into a Services Agreement or Services Agreement(s) covering all of the Operator Stations covered in the Outgoing Operator's Services Agreement.

4. Retention of Validators and Gate Readers

4.1 Paragraph 2 of this Schedule 15 shall not apply if:-

4.1.1 except where paragraph 3 applies, on any termination the relevant Operator gives notice to TTL within 3 months of the date of issue of the notice for termination of the Agreement or cessation of participation of that Operator (as the case may be) that the Operator wishes to retain the Validators and/or Gate Readers and any associated casing, pedestals and cabling (including power and data cabling) related to such Validators and/or Gate Readers on its Operator Stations (for the purposes of this paragraph 4, the "Relevant Equipment"); and

4.1.2 TTL and the Operator are able to reach agreement as to the terms on which the Operator may retain the Relevant Equipment:-

4.1.2.1 such agreement not to be unreasonably withheld or delayed in so far as TTL is entitled to permit the Operator to retain the Relevant Equipment; and

4.1.2.2 it being acknowledged that the parties will need to reach agreement on matters including (without limitation):-

- (a) the charges payable by the Operator for retaining the Relevant Equipment subject to paragraph 4.1.3;
- (b) the period of retention;
- (c) risk and insurance responsibilities;
- (d) the extent of any services (if any) which it may be necessary or desirable for TTL to provide in connection with such use.

4.2 Where the Operator has given notice under paragraph 4.1.1 that it wishes to retain the Relevant Equipment and TTL does not own the Relevant Equipment (or any part of it) then TTL shall use its reasonable endeavours to facilitate and not to obstruct negotiations between the Operator and the owner of the Relevant Equipment.

4.3 The Parties shall act in good faith in the negotiations of the items contemplated under paragraph 4.1.2.2 and there shall be no requirement that the Operator take services from TTL in order to purchase the PAYG Equipment or on TTL to provide services.

4.4 Where TTL has acted unreasonably in failing to reach agreement with the Operator in breach of paragraph 4.1.2, the Operator shall be entitled by notice to require TTL to recover the Relevant Equipment within a reasonable time at TTL's cost.

5. **Station Computers at Operator Stations**

On termination of this Agreement, or cessation of the participation of an Operator from this Agreement, howsoever arising, and subject (where applicable) to the Operator having complied with the Operator's obligation under paragraph 5 of Schedule 14, TTL will promptly transfer or procure the transfer of its rights and title in the Station Computer at each gated Operator Station to the Operator, subject to the following conditions:-

5.1 for this purpose a "Station Computer" is the Station Computer referred to in the definition of the PAYG Equipment;

5.2 this Clause 5 shall not refer to Station Computers located at Joint Stations, nor those which, although located at an Operator Station are the responsibility of a third party (as identified in Table 15 to Schedule 3 from time to time);

5.3 the Operator will be responsible for ensuring that it has all such rights and licenses as it requires for the continued possession and use of the Station Computer and TTL gives no assurance or warranty in this respect.

For the period up to such transfer, TTL will hold its interest in the relevant Station Computer(s) on trust for the Operator and the Operator shall be the beneficial owner of the same.

SCHEDULE 16

Development of PAYG Apportionment Methodology

- A1 London Overground Operator
- A1.1 For the purposes of this Schedule 16 and for so long as settlement of revenues allocated to any London Overground Operator is to be made by TTL through RSP as provided in Clause 10.2 the services operated by that London Overground Operator shall be treated as if they were Operators' Services and references in this Schedule 16 only to "Operators" shall be treated as including that London Overground Operator.
- A1.2 TTL undertakes that it shall not cease the arrangement for settlement of PAYG revenues allocated to any London Overground Operator through RSP as provided in Clause 10.2 during the term of the PAYG Agreement without having first agreed with the Operators amendments to Clause 10 and this Schedule 16 which properly and fairly take account of the London Overground Operator ceasing to be part of the aggregate settlement of net PAYG revenues.
- A1.3 Without prejudice to the provisions of Clause 11 and Schedule 8 dealing with Commissions payable by and to any London Overground Operator, nothing in this Schedule 16 is intended to or shall constitute the London Overground Operator as an Operator for any purposes of this Agreement other than this Schedule 16.
1. This Schedule sets out the apportionment methodology which the Parties have agreed to adopt as a replacement for paragraphs 1.2 and 1.3 of Part 2 of Schedule 7 with effect from the Schedule 16 Commencement Date following TTL's development of the PAYG System to support such methodology, and TTL having satisfied the Operators of the ability of the PAYG System to support this methodology, in accordance with Clause 16.8 (c).
2. The allocation of revenue for Incomplete Journeys shall continue as described in Schedule 7, Part 2 paragraphs 1.5 and 1.6, and the remainder of Schedule 7 (other than Part 2, paragraphs 1.2 and 1.3) is unaffected by the provisions of this Schedule 16.
- 3 The methodology set out in this Schedule 16 involves:
- (a) apportionment of revenue on an ongoing basis with effect from and including the Schedule 16 Commencement Date as set out in accordance with the provisions of Part 1 below; and
 - (b) an annual review of the revenue allocated to the Operators for all PAYG Inside Cap Rail Journeys (as defined in paragraph 5 below) in accordance with the provisions of Part 2 and the consequent determination of whether or not any additional payment is due to the Operators, and the value of such additional payment, if applicable.

Part 1: Ongoing Allocations

4. The allocation of revenue for Complete Journeys (which, for the avoidance of doubt, includes Here-to-Here Journeys, same Station Exit Journeys and Auto-completed Journeys) is determined in accordance with Part 1 of this Schedule 16, and the treatment of each such journey for apportionment purposes depends on whether the journey concerned is a Capped Rail Journey or an Uncapped Rail Journey, as defined below.
5. Considering the use of an item of TTL Smartmedia over the course of a Traffic Day during which one or more Complete Journeys is made, and having regard to the aggregate value of the amounts of PAYG Value Expended on that Traffic Day for all Complete Journeys and all Bus Journeys after the application of any applicable PAYG Price Caps (the "*Total Daily Expenditure*") then:
 - (i) a "*Capped Rail Journey*" means a Complete Journey where there would have been no increase in the Total Daily Expenditure were the PAYG Uncapped Fare for that journey to be increased (assuming all other PAYG fares and PAYG Price Caps were to remain unchanged);
 - (ii) a "*Capped Bus Journey*" means a Bus Journey where there would have been no increase in the Total Daily Expenditure were the PAYG Uncapped Fare for that journey to be increased (assuming all other PAYG fares and PAYG Price Caps were to remain unchanged);
 - (iii) an "*Uncapped Rail Journey*" means a Complete Journey which is not a Capped Rail Journey.

6. Uncapped Rail Journeys

The allocation to the Operators in respect of each Uncapped Rail Journey with an Entry Validation at station O and an Exit Validation at station D travelling via Route R shall be:

- (i) in the case of each PAYG Only Journey:

$$\text{Operator Allocation} = \text{PAYG Value Expended} \times M_{\text{ODR}}$$

where M_{ODR} is the percentage allocation used to calculate the revenue due to the Operators as specified in the PAYG Only Apportionment Matrix for a journey from origin station O to destination station D via Route R; and

- (ii) in the case of each PAYG Mixed Journey:

$$\text{Operator Allocation} = \text{PAYG Value Expended} \times M'_{\text{ODR}}$$

where M'_{ODR} is the percentage allocation used to calculate the revenue due to the Operators as specified in the PAYG Mixed Apportionment Matrix for a journey from origin station O to destination station D via Route R.

7. Capped Rail Journeys

The allocation to the Operators in respect of all Capped Rail Journeys made on an item of TTL Smartmedia during the course of a Traffic Day (a “User Day”) shall be calculated in accordance with the following formula:

$$\text{Operator Allocation} = Y \times N / ((N + T) + B)$$

where:

- (i) Y is the aggregate of the amounts of PAYG Value Expended in relation to all Capped Rail Journeys and all Capped Bus Journeys made on the User Day concerned;
- (ii) N is the total distance in kilometres travelled on Operators’ Services on all Capped Rail Journeys on the User Day concerned calculated as follows:

$$N = \sum_{i=1}^n M_{ODRi} \cdot (N_{ODRi} + T_{ODRi}) + \sum_{j=1}^n M'_{ODRj} \cdot \sum_z (N_{ODRjz} + T_{ODRjz}) \frac{S_{ODjz}}{S_{ODj}}$$

where:

i represents each Capped Rail Journey which is a PAYG Only Journey;

j represents each Capped Rail Journey which is a PAYG Mixed Journey;

M_{ODR} is the percentage allocation used to calculate the revenue due to the Operators as set out in the PAYG Only Apportionment Matrix for a journey with an Entry Validation at station O, and an Exit Validation at station D and travelling via Route R;

N_{ODR} is the distance in kilometres travelled on Operators’ Services in travelling from origin station O to destination station D via Route R (and in those cases where Alternative Sub-routes exist the distance shall be that pertaining to the Primary Sub-route calculated pursuant to Schedule 7, Part 2 paragraph 2.9);

T_{ODR} is the distance in kilometres travelled on TTL Rail Services in travelling from origin station O to destination station D via Route R (and in those cases where Alternative Sub-routes exist the distance shall be that pertaining to the Primary Sub-route calculated pursuant to Schedule 7, Part 2, paragraph 2.9); and

M'_{ODR} , N_{ODRz} , T_{ODRz} , S_{ODz} , S_{OD} , and z have the meanings given in Schedule 7, Part 2, paragraph 2.15.

- (iii) (N + T) is the total distance in kilometres travelled on Operator Services and TTL Rail Services on all Capped Rail Journeys on the User Day concerned calculated as follows:

$$N + T = \sum_{i=1}^n (N_{ODRi} + T_{ODRi}) + \sum_{j=1}^n \sum_z (N_{ODRjz} + T_{ODRjz}) \frac{S_{ODjz}}{S_{ODj}}$$

where the terms used have the same meaning as in sub-para (ii);

- (iv) B is the total distance in kilometres travelled on bus services calculated as the number of Capped Bus Journeys made on the User Day concerned multiplied by the average length of all bus journeys made by holders of One Day Travelcards calculated from the results of the Greater London Bus Passenger Survey.

Unless the Parties agree otherwise, the average length to be used will be as estimated from the most recently available four quarters' results of the Greater London Bus Passenger Survey. Such estimate will be produced at the Schedule 16 Commencement Date and then updated annually. In the event that the number of One Day Travelcard sales within the zonal area falls below 40% of that pertaining at the date of this Agreement, then the Parties will, acting reasonably, agree an alternative methodology for estimating the average journey length of Capped Bus Journeys.

In the event that the Parties are unable to agree an alternative methodology then the average length of all journeys made by Travelcard holders on buses shall be used, calculated from the results of the Greater London Bus Passenger Survey.

Part 2: Annual Review

8. In respect of each successive 12 consecutive month period starting on the Schedule 16 Commencement Date ("**Compensation Year**" with each Compensation Year after the first commencing on the day after the end of the preceding Compensation Year) TTL shall conduct the following analysis set out in this Part 2 in respect of PAYG use during each Compensation Year and shall present the results to the Operators (including such supporting detail as they may reasonably request) no later than three months after the end of the Compensation Year concerned. Where this Agreement terminates part way through a Compensation Year, the Compensation Year shall be treated as terminating on the date of termination and TTL shall conduct the review under this Part 2 in respect of such shortened period.
9. A random sample ("**Sample**") shall be taken of User Days (as defined in paragraph 7) on which one or more Capped Rail Journeys were made. The Sample shall be drawn to be as representative as possible of the totality of such User Days over the Compensation Year and TTL will agree with the Operators the methodology by which the Sample will be drawn and in the event of a failure to agree, Clause 22 will apply.

10. Capped Rail Journeys and Capped Bus Journeys in the Sample ("*Relevant Journeys*") shall be processed in accordance with the provisions of Paragraph 7 of this Schedule 16 to determine the notional sum which would have been due to the Operators from the Sample.
11. Relevant Journeys in the Sample shall also be processed in accordance with the following provisions to determine the revenue which would have been due to the Operators under an alternative approach, based on the methodology for apportioning Travelcard revenue.
12. The Sample shall be divided into categories (each being a "*Sample Category*") based on classifying each User Day according to:
- (a) whether the first Relevant Journey was:
 - (i) a Rail Journey commencing at an Operator Station or a London Overground Station; or
 - (ii) a Rail Journey commencing at any other station, or a Bus Journey; and
 - (b) the PAYG Price Cap applicable in accordance with Schedule 3 Part 2 Table 6.
13. For the purposes of the categorisation set out in paragraph 12 (b) no differentiation shall be made in respect of User Days and Relevant Journeys where discounts are applied to the PAYG Price Caps or the PAYG fares charged, and the User Days and Relevant Journeys shall be aggregated within the appropriate Sample Category whether or not any discounts were applied.
14. The notional sum due to the Operators from Capped Rail Journeys in the Sample in respect of each Sample Category (X_{cat}) shall be calculated with reference to all the User Days and Relevant Journeys included within the Sample Category concerned in accordance with the following formula:
- $$X_{cat} = \sum Y_i \times \sum N_i / (\sum (N_i + T_i) + B_i)$$
- where:
- \sum means the summation of the calculation in respect of each relevant User Day;
 - i represents each User Day;
 - Y is the total amount of PAYG Value Expended in relation to all Relevant Journeys made on the User Day concerned; and
 - (N + T) and B have the values for each User Day concerned calculated in accordance with paragraph 7.
15. The total notional sum due to the Operators from the Sample shall be the aggregate of the sums due for all the Sample Categories calculated in accordance with paragraph 14.
16. The "*Operator Loss*" shall be calculated as follows:

$$\text{Operator Loss} = ((A-D)/D) \times C$$

where

A is the notional sum due to the Operators calculated pursuant to paragraph 15;

D is the notional sum due to the Operators calculated pursuant to paragraph 10; and

C is the total value of the PAYG Value Expended in respect of Capped Rail Journeys allocated to the Operators under this Agreement during the calendar year concerned.

17. The "**Payment Threshold**" shall be calculated for each Compensation Year in accordance with the following formula:

$$\text{Payment Threshold} = (\text{£}0.75 \text{ million} + (\text{£}0.1 \text{ million} \times Y) \times (\text{RPI } 2 \div \text{RPI } 1))$$

where

Y has the value zero in respect of the first Compensation Year and increases by one for each subsequent Compensation Year:

RPI 2 is the value of the Retail Prices Index last published before the end of the Compensation Year in respect of which the Payment Threshold is being calculated;

RPI 1 is the value of the Retail Prices Index last published before the Schedule 16 Commencement Date.

18. If the Operator Loss is greater than the Payment Threshold in respect of any Compensation Year then TTL shall pay to the Operators the amount by which the Operator Loss exceeds the Payment Threshold (the "**Compensation Amount**"). Such payment shall be made net of any Interim Payment already made in respect of the Compensation Year concerned pursuant to paragraph 19 (or 23, where applicable). If the Compensation Amount is less than any Interim Payment made then the Operators shall pay to TTL the amount by which the Interim Payment exceeds the Compensation Amount. Any sum due in accordance with this paragraph 18 will be paid on the Settlement Date which next follows the day which is five months after the last day of the Compensation Year.
19. If the Compensation Amount in respect of any Compensation Year is greater than [REDACTED], then TTL shall pay to the Operators a sum equal to 50% of the Compensation Amount as an interim payment towards any Compensation Amount payable in respect of the following Compensation Year (the "**Interim Payment**"). Any sum due in accordance with this paragraph 19 will be paid on the Settlement Date which next follows the day which is six months after the date of the payment made pursuant to paragraph 18.
20. If the Operator Loss is less than the Payment Threshold in respect of any Compensation Year then no payment will be due between the Parties.

21. If there are three successive Compensation Years in which the provisions of paragraph 20 apply, then the annual review process set out in paragraphs 8 to 19 of this Schedule 16 shall be discontinued and no further payments to the Operators in respect of the annual review arrangements set out in this Part 2 shall be made.
22. In respect of the six month period following the Schedule 16 Commencement Date TTL shall conduct the analysis set out in paragraphs 8 to 16 in respect of PAYG use during that six month Period and shall present the results to the Operators (including such supporting detail as they may reasonably request) no later than nine months after the Schedule 16 Commencement Date.
23. If the Operator Loss thus calculated is greater than [REDACTED] then TTL shall pay to the Operators the amount by which the Operator Loss exceeds £375,000. Any sum due in accordance with this paragraph 23 will be paid on the Settlement Date which next follows the day which is eleven months after the Schedule 16 Commencement Date. Such payment (if any) shall constitute the Interim Payment in respect of the Compensation Year concerned.

Part 3 : Interest on Compensation Amount

24. Interest will be payable on any Compensation Amount, and will be paid at the same time as payment of such Compensation Amount in accordance with the timescale set out in paragraph 18. The amount of interest payment will be calculated on the basis that 1/13 of the Compensation Amount payable (the "*Period Compensation Amount*") is in respect of each Settlement Period within the Compensation Year concerned. The amount due will be:

(a)

$$\sum_{i=1}^{13} R.P \frac{D_i}{365}$$

where

R is 6.5% or such other rate as may be agreed pursuant to Clause 11.5

P is the Period Compensation Amount

D_i is the number of days in the period starting from the Settlement Date in respect of Settlement Period I and ending with the date on which the Compensation Amount is to be paid in accordance with Paragraph 18

and, if an Interim Payment has been made, less

- (b) R x Interim Payment x D/365

where

R has the meaning giving in (a)

D is the number of days in the period starting from the date on which the Interim Payment was made and ending with the date on which the Compensation Amount is to be paid in accordance with Paragraph 18.

For the avoidance of doubt, if the amount due calculated pursuant to this paragraph 24 is negative, then it shall be payable by the Operators to TTL.

SCHEDULE 17

PAYG Operations Code of Practice

1. The Parties agree to:-
 - a. work together and co-operate with the aim of establishing, developing and maintaining (with such changes as may be required from time to time) a code of practice to cover the operation of PAYG (the "PAYG Operations Code of Practice" or "OCOP") that will document the procedures to be followed by the Parties' staff and management in the operation of PAYG; and
 - b. use all reasonable endeavours to agree the contents of such OCOP.

The remaining provisions of this Schedule 17 set out principles with which the Parties will comply in performing their obligations under this paragraph 1.

2. In the event of conflict between the terms of this Agreement and the OCOP, this Agreement shall prevail.
3. The OCOP may contain two types of requirements:
 - a. "Mandatory Requirements" meaning a requirement, conformance with which is essential to the operation of PAYG; and
 - b. "Advisory Requirements" meaning a requirement, the conformance with which is beneficial to the operation of PAYG but not essential.
4. The Parties undertake to use all reasonable endeavours to agree consistent operational practices and procedures for the OCOP.
5. Without prejudice to the Parties' obligations under paragraph 1 or to the requirements of paragraph 7 of this Schedule 17, no amendments to the OCOP will be made without prior agreement of all the Parties.
6. Items should only be included in the OCOP that are:
 - a. necessary for the consistent operation of PAYG; or
 - b. desirable to do so, to the extent and for so long as this does not impose any unreasonable constraint or cost on the Parties;
7. No provision of the OCOP may be made a Mandatory Requirement without the agreement of all Parties in accordance with the Change Control Procedure.
8. Without prejudice to the Parties' obligations under paragraph 1, where the Parties cannot agree on a provision of the OCOP, TTL will determine the procedures to be followed in respect of TTL operations and staff and the Operators will determine the procedures to be followed by their staff. Without limiting the Parties' other obligations to each other and subject to the other provisions of this Schedule 17, no Party shall have the right to determine the processes to be followed by the staff of another Party without that other Party's agreement.

9. Where there is more than one possible option for a provision in OCOP, the process chosen will be the most cost-effective practicable solution which is consistent with the Parties' obligations under this Agreement and the objectives for PAYG as set out and reflected in this Agreement.

SCHEDULE 18

"Oyster" Name and Logo

Trademark	Classes	Registration Number	Registration Date
Oyster	35,36	2143623	02 Jan 2000
Oyster / Oyster Card	9,39	2267516A	01 Nov 2002
Oyster / Oyster Card	16, 36	2267516B	13 Dec 2002
	9,16,35,36,39	2363463	06 Oct 2006
Oyster Pre Pay / Pre Pay Oyster	9,16,35,36,39	2342127	29 Oct 2004
Oyster Plus / Oyster +	9,16,35,36,39	2366155	21 Oct 2005
Oyster Pay	9,16,35,36,39	2366156	15 Jul 2005
Oyster Tourist	9,16,35,36,39	2366158	17 Dec 2004
Oyster Visitor card / Oyster Visitorcard	9,16,35,36,39	2366160	17 Dec 2004
Oyster lite	9,16,35,36,39	2423145A	28 Sep 2007
Oyster Light	9,16,35,36,39	2423145B	28 Sep 2007
	09, 16, 36, 39	2269360	03 Jan 2003
TOUCH IN TOUCH OUT	16,35,36	2462463	08 May 2009
	9,16,35,36,39	2363438	11 November 2005

	9,16,35,36,39	2441601	22 February 2008
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SCHEDULE 19

Contract Management Structure

1. Purpose

This Schedule sets out the contract management structure that shall operate between the Operators and TTL.

The objective of the contract management structure is to ensure that a successful working relationship is maintained that will enable the Parties to discuss the strategic objectives of the relationship between them and to monitor compliance with their respective obligations.

2. Principles Of Contract Management

Contract management will be effected via the following main groups, who may discuss their respective issues as set out in Appendix 1 to this Schedule 19:

- "Contract Management Board"
- "Service Delivery Group"
- "Project Management Group"

3. Obligations

3.1 Representatives

(a) TTL shall designate a person to act as the main point of contact on behalf of TTL in relation to this Agreement, the Services Agreement and Implementation Agreement (if applicable) (the "TTL Relationship Manager"). For the avoidance of doubt, such appointment is in addition to TTL's obligations to make appointments of persons under Clause 3.1 of the Services Agreement and the equivalent Clause of the Implementation Agreement, except as expressly set out otherwise in this Schedule 19.

(b) TTL will also designate:

- (i) a person to ensure that TTL's Responsibilities under the Agreement prior to PAYG Launch and under the Implementation Agreement are carried out (the "TTL Programme Manager(s)"); and
- (ii) various persons each of whom will be responsible for the operational delivery of one or more of the TTL Services to ensure that TTL's day-to-day obligations and responsibilities are carried out in accordance with this Agreement (the "TTL Service Manager(s)");

- (c) The Operators shall designate a person from ATOC to act as the main point of contact on behalf of the Operators (subject always to Clause 4) in relation to this Agreement, the Services Agreement and Implementation Agreement (the "Relationship Manager") .
 - (d) Each Operator shall designate a person to act as the main point of contact on behalf of such Operator in relation to this Agreement, the Services Agreement and Implementation Agreement (if applicable) (the "Contract Manager"). For the avoidance of doubt, such appointment is in addition to such Operator's obligations to make appointments of persons under Clause 3.1 of the Services Agreement and the equivalent Clause of the Implementation Agreement.
- 3.2 Each Party will also designate an alternate to each of the representatives set out in paragraph 3.1 above.
- 3.3 Each Party shall ensure that its representative designated under paragraph 3.1 above (or, where the representative is unavailable, the alternate designated under paragraph 3.2 above) shall attend all meetings within its remit which have been validly called in accordance with this Schedule 19, except where such person is unable to do so due to any circumstances beyond their reasonable control.

4. Contract Management Arrangements

The Contract Management Board, Project Management Group and the Service Delivery Group shall, unless agreed otherwise, abide by the following:

- (i) the functions of the chairman will be to manage the proceedings of the meeting and approve all minutes of meetings before circulation by the secretary pursuant to paragraph 4 (iii) below;
- (ii) a representative of ATOC will act as secretary, unless otherwise agreed;
- (iii) the functions of the secretary shall be to give notice of meetings to all attendees and to record and minute all meetings and circulate such minutes;
- (iv) a minimum of 10 Business Days written notice, (stating the time, place and agenda for a meeting) must be given to effectively call a meeting;

and in the case of the Contract Management Board only:

- (v) the chairman shall be nominated by the Operators (collectively);

and in the case of the Service Delivery Group and Project Management Group:

- (vi) the chairman shall be as nominated by TTL.

Appendix 1 to Schedule 19

1 Contract Management Board

(a) Purpose:

The Contract Management Board will discuss the service, financial and contract management elements of the relationship between the Parties.

The Contract Management Board will, at its first meeting, discuss and agree their terms of reference which will include:

- (i) issues within remit to discuss;
- (ii) membership of the Contract Management Board including possible alternates;
- (iii) meeting frequency and detailed procedures for notice;
- (iv) chairman's and secretary's detailed responsibilities relating to the meetings.

(b) Proposed Meeting Frequency:

The Contract Management Board will meet monthly for the first year or until six months after the PAYG Launch Date, whichever is later, and then quarterly thereafter unless the Parties agree otherwise.

(c) Proposed Membership:

TTL: Director responsible for PAYG
Such person appointed under Schedule 19, paragraph 3.1(a)

Operators: Managing Director of RSP
Such persons appointed under Schedule 19 paragraphs 3.1 (c) and (d)

(d) Proposed issues for Contract Management Board to discuss:

- (i) changes;
- (ii) payment and service issues;
- (iii) changes to TTL Charges;
- (iv) joint business planning;
- (v) possible changes to OCOP;
- (vi) revenue allocation and settlement;

- (vii) review of business continuity, security and exit management issues; and
- (viii) other similar topics.

2 Project Management Group

(a) Purpose:

The Project Management Group is predominantly comprised of respective project managers for each of the Operators and TTL and will review and guide the delivery of all activities required to achieve PAYG Launch as part of the Integrated Programme plan defined in Schedule 13 of this Agreement.

The Project Management Group will, at its first meeting, discuss and agree their terms of reference which will include:

- (i) issues within remit;
- (ii) membership of the group including possible alternates;
- (iii) meeting frequency and detailed procedures for notice; and
- (iv) chairman's and secretary's detailed responsibilities;

(b) Proposed Meeting Frequency:

This group will meet as follows:

- (i) ad hoc meetings: to discuss operational issues arising and to escalate problems where appropriate, without limitation; and
- (ii) monthly progress reviews: to review the parties performance against the Integrated Programme Plan , to review major problems, and to discuss issues, without limitation.

(c) Proposed Membership:

The TTL Relationship Manager, the ATOC Relationship Manager, the TTL Programme Managers, the Operator Programme Manager representing each of the Operators, the persons responsible for delivery of work assigned to workstreams comprising personnel from TTL and the Operators (Workstream Leaders), and representatives of the Ticketing Services Provider (as required).

(d) Reporting to / escalation.

To the Contract Management Board.

(e) Proposed issues within the group's remit:

- (i) implementation of PAYG on Operators' network;
- (ii) issues impacting on the achievement of Integrated Programme Plan;
- (iii) monitoring performance against the Integrated Programme Plan;
- (iv) other similar topics.

The Parties acknowledge that the Project Management Group existed prior to the date of this Agreement, and therefore will continue to meet and operate as such Project Management Group operates at the date of this Agreement, including secretaryship arrangements.

At the first meeting during the term of this Agreement, the Parties will confirm the terms of reference the Project Management Group has been working to prior to the date of this Agreement.

3 Service Delivery Group

For the avoidance of doubt, the Service Delivery Group is the same group constituted under the Services Agreement.

(a) Purpose:

The Service Delivery Group will review and guide service quality and user satisfaction on a day to day basis.

The Service Delivery Group will, at its first meeting, discuss and agree their terms of reference which will include:

- (i) issues within remit;
- (ii) membership of the Service Delivery Group including possible alternates;
- (iii) meeting frequency and detailed procedures for notice;
- (iv) chairman's and secretary's detailed responsibilities relating to the meetings.

(b) Proposed Meeting Frequency:

The Service Delivery Group will meet as follows:

- (i) ad hoc meetings: to discuss operational issues arising;
- (ii) periodical operational reviews: to discuss trends; and
- (iii) monthly performance reviews: to review TTL's operational performance against the relevant Service Levels, to review major problems, to discuss issues and to review Operators' customer satisfaction, without limitation.

(c) Proposed Membership:

The TTL Relationship Manager, the ATOC Relationship Manager, the TTL Service Managers, and either the Contract Managers or the Operator Service Managers representing each of the Operators (as required).

(d) Proposed issues for the Service Delivery Group to discuss

- (i) service delivery issues on the Operators' networks;
- (ii) monitoring performance against Service Levels;
- (iii) future requirements for changes in quality of TTL Services;
and
- (iv) other similar topics.

SCHEDULE 20

Postcode Matrix

PAYG retail network – distribution of outlets

Area	Number of Outlets
Outside Greater London	12
Central London	260
Rest of Greater London	3228
TOTAL (defined areas)	3500
Additional locations to be allocated to meet demand	500
Grand Total	4000

Allocation of outlets within Greater London by postal area							
Central London				Central London			
EC1A 4	1	EC1	31	SW1X 7	1		
EC1A 9	1			SW1X 9	1		
EC1M 6	1			SW1Y 4	2		
EC1N 7	1			SW1Y 6	1		
EC1N 8	2			W1B 2	1	W1	38
EC1R 0	1			W1B 3	1		
EC1R 1	1			W1B 5	1		
EC1R 4	2			W1C 2	0		
EC1R 5	2			W1D 1	1		
EC1V 0	1			W1D 2	0		
EC1V 1	1			W1D 4	0		
EC1V 2	1			W1D 5	0		
EC1V 4	3			W1D 7	0		
EC1V 7	3			W1F 0	1		
EC1V 8	2			W1F 7	0		
EC1V 9	2			W1F 8	1		
EC1M 7	1			W1F 9	1		
EC1Y 1	1			W1H 5	1		
EC1Y 2	1			W1J 0	1		
EC1Y 8	3			W1j 6	1		
EC2A 3	1	EC2	6	W1J 7	1		
EC2A 4	1			W1J 9	2		
EC2M 3	1			W1K 6	1		
EC2M 4	1			W1K 7	1		
EC2M 6	1			W1M 1	1		

EC2N 4	1			W1P 1	0		
EC2R 8	0			W1P 7	0		
EC3M 4	1	EC3	6	W1P 9	3		
EC3M 6	1			W1S 1	1		
EC3N 1	2			W1S 2	1		
EC3N 2	1			W1S 3	1		
EC3V 1	1			W1S 4	1		
EC4A 4	1	EC4	8	W1T 1	1		
EC4M 7	1			W1T 2	1		
EC4M 9	1			W1T 4	1		
EC4N 5	1			W1T 5	1		
EC4N 8	1			W1T 5	1		
EC4N 6	1			W1T 7	1		
EC4V 5	1			W1U 1	1		
EC4Y 1	1			W1U 3	1		
NW1 0	5	NW1	31	W1U 4	1		
NW1 1	6			W1U 5	1		
NW1 2	5			W1U 6	1		
NW1 3	3			W1U 7	1		
NW1 4	1			W1W 5	1		
NW1 5	4			W1W 6	1		
NW1 6	1			W1W 8	1		
NW1 8	5			W1Y 3	0		
NW1 9	1			WC1A 1	1	WC1	26
SE1 0	2	SE1	54	WC1A 2	0		
SE1 1	3			WC1B 3	1		
SE1 2	7			WC1B 4	1		
SE1 3	6			WC1B 5	1		
SE1 4	10			WC1E 6	0		
SE1 5	8			WC1E 7	1		
SE1 6	4			WC1H 8	1		
SE1 7	3			WC1H 9	1		
SE1 8	6			WC1N 1	3		
SE1 9	5			WC1N 3	1		
SW1A 2	1	SW1	33	WC1R 4	1		
SW1E 5	1			WC1V 6	2		
SW1E 6	1			WC1V 7	1		
SW1H 0	2			WC1X 0	0		
SW1H 9	1			WC1X 8	9		
SW1P 1	3			WC1X 9	2		
SW1P 2	2			WC2A 1	1	WC2	22
SW1P 3	1			WC2A 2	1		
SW1P 4	2			WC2A 3	2		
SW1V 1	5			WC2B 5	1		
SW1V 2	4			WC2B 6	1		
SW1V 3	2			WC2E 8	1		
SW1V 4	1			WC2H 0	2		
SW1W 0	1			WC2H 7	1		
SW1W 8	1			WC2H 8	2		
SW1W 9	5			WC2H 9	4		
				WC2N 4	2		

CR2 6	4			RM1 2	2		
CR2 7	2			RM1 3	1		
CR2 8	4			RM1 4	3		
CR2 9	4			RM10 7	5	RM10	18
CR3 0	2	CR3	4	RM10 8	8		
CR3 5	1			RM10 9	5		
CR3 6	1			RM11 1	5	RM11	12
CR4 1	7	CR4	24	RM11 2	3		
CR4 2	5			RM11 3	4		
CR4 3	6			RM12 4	5	RM12	10
CR4 4	6			RM12 5	2		
CR5 1	1	CR5	7	RM12 6	3		
CR5 2	4			RM13 7	2	RM13	11
CR5 3	2			RM13 8	3		
CR6 9	1	CR6	1	RM13 9	6		
CR7 6	4	CR7	21	RM14 1	3	RM14	7
CR7 7	9			RM14 2	3		
CR7 8	8			RM14 3	1		
CR8 1	3	CR8	10	RM15 4	1	RM15	1
CR8 2	4			RM2 5	3	RM2	6
CR8 4	2			RM2 6	3		
CR8 5	1			RM3 0	3	RM3	12
DA1 1	5	DA1	13	RM3 7	4		
DA1 2	1			RM3 8	3		
DA1 3	3			RM3 9	2		
DA1 4	3			RM5 2	3	RM5	7
DA1 5	1			RM5 3	4		
DA14 4	2	DA14	7	RM6 4	6	RM6	13
DA14 5	2			RM6 5	3		
DA14 6	3			RM6 6	4		
DA15 7	2	DA15	9	RM7 0	5	RM7	12
DA15 8	3			RM7 7	2		
DA15 9	4			RM7 8	3		
DA16 1	6	DA16	13	RM7 9	2		
DA16 2	2			RM8 1	5	RM8	18
DA16 3	5			RM8 2	7		
DA17 5	5	DA17	8	RM8 3	6		
DA17 6	3			RM9 4	5	RM9	10
DA18 4	2	DA18	2	RM9 5	4		
DA2 6	1	DA2	1	RM9 6	1		
DA5 1	3	DA5	7	SE10 0	3	SE10	12
DA5 3	4			SE10 8	3		
DA6 7	2	DA6	4	SE10 9	6		
DA6 8	2			SE11 4	4	SE11	10
DA7 4	2	DA7	9	SE11 5	3		
DA7 5	4			SE11 6	3		
DA7 6	3			SE12 0	4	SE12	12
DA8 1	5	DA8	15	SE12 8	5		
DA8 2	4			SE12 9	3		
DA8 3	6			SE13 5	4	SE13	17
DA9 9	1	DA9	1	SE13 6	7		

E10	4	E1	27	SE13 7	6		
E11	2			SE14 5	6	SE14	10
E12	3			SE14 6	4		
E13	2			SE15 1	5	SE15	26
E14	6			SE15 2	4		
E15	4			SE15 3	6		
E16	2			SE15 4	3		
E17	1			SE15 5	6		
E18	2			SE15 6	2		
E19	1			SE16 2	4	SE16	18
E10 5	7	E10	26	SE16 3	4		
E10 6	9			SE16 4	5		
E10 7	10			SE16 5	2		
E11 1	3	E11	20	SE16 7	3		
E11 2	5			SE17 1	4	SE17	15
E11 3	6			SE17 2	6		
E11 4	6			SE17 3	5		
E12 5	6	E12	15	SE18 1	8	SE18	37
E12 6	9			SE18 2	4		
E13 0	9	E13	19	SE18 3	5		
E13 8	5			SE18 4	3		
E13 9	5			SE18 5	4		
E14 0	5	E14	33	SE18 6	8		
E14 2	1			SE18 7	5		
E14 3	6			SE19 1	4	SE19	11
E14 4	2			SE19 2	3		
E14 5	1			SE19 3	4		
E14 6	4			SE20	5	SE2	11
E14 7	5			SE2 9	6		
E14 8	5			SE20 7	7	SE20	11
E14 9	4			SE20 8	4		
E15 1	6	E15	21	SE21 7	2	SE21	5
E15 2	4			SE21 8	3		
E15 3	5			SE22 0	4	SE22	17
E15 4	6			SE22 8	8		
E16 1	5	E16	19	SE22 9	5		
E16 2	5			SE23 1	7	SE23	15
E16 3	6			SE23 2	3		
E16 4	3			SE23 3	5		
E17 3	3	E17	33	SE24 0	3	SE24	8
E17 4	8			SE24 9	5		
E17 5	4			SE25 4	7	SE25	16
E17 6	7			SE25 5	4		
E17 7	4			SE25 6	5		
E17 8	2			SE26 4	3	SE26	12
E17 9	5			SE26 5	6		
E18 1	2	E18	5	SE26 6	3		
E18 2	3			SE27 0	5	SE27	13
E20	4	E2	18	SE27 9	8		
E26	3			SE28 0	2	SE28	5
E27	3			SE28 8	3		

E2 8	5			SE3 0	2	SE3	13
E2 9	3			SE3 7	4		
E3 2	4	E3	16	SE3 8	4		
E3 3	4			SE3 9	3		
E3 4	4			SE4 1	5	SE4	12
E3 5	4			SE4 2	7		
E4 6	4	E4	21	SE5 0	6	SE5	26
E4 7	2			SE5 7	6		
E4 8	7			SE5 8	8		
E4 9	8			SE5 9	6		
E5 0	8	E5	21	SE6 1	7	SE6	24
E5 8	7			SE6 2	5		
E5 9	6			SE6 3	7		
E6 1	10	E6	31	SE6 4	5		
E6 2	7			SE7 7	6	SE7	10
E6 3	5			SE7 8	4		
E6 4	1			SE8 3	5	SE8	12
E6 5	3			SE8 4	4		
E6 6	4			SE8 5	3		
E6 7	1			SE9 1	5	SE9	27
E7 0	5	E7	20	SE9 2	4		
E7 8	8			SE9 3	6		
E7 9	7			SE9 4	5		
E8 1	6	E8	20	SE9 5	3		
E8 2	4			SE9 6	4		
E8 3	5			SL1 1	4	SL1	5
E8 4	5			SL1 2	1		
E9 5	6	E9	16	SL3 0	1	SL3	3
E9 6	4			SL3 7	1		
E9 7	6			SL3 8	1		
EN1 1	5	EN1	13	SM1 1	3	SM1	14
EN1 3	5			SM1 2	2		
EN1 4	3			SM1 3	5		
EN2 0	4	EN2	12	SM1 4	4		
EN2 6	3			SM2 5	2	SM2	5
EN2 7	3			SM2 6	2		
EN2 8	1			SM2 7	1		
EN2 9	1			SM3 8	5	SM3	11
EN3 4	8	EN3	24	SM3 9	6		
EN3 5	6			SM4 4	6	SM4	15
EN3 6	6			SM4 5	4		
EN3 7	4			SM4 6	5		
EN4 0	2	EN4	10	SM5 1	5	SM5	15
EN4 8	6			SM5 2	5		
EN4 9	2			SM5 3	5		
EN5 1	3	EN5	15	SM6 0	2	SM6	15
EN5 2	3			SM6 7	3		
EN5 3	1			SM6 8	5		
EN5 4	2			SM6 9	5		
EN5 5	6			SM7 2	1	SM7	2
EN6 1	4	EN6	8	SM7 3	1		

EN6 2	3			SW10 0	4	SW10	7
EN6 5	1			SW10 9	3		
EN8 7	3	EN8	3	SW11 1	9	SW11	35
HA0 1	4	HA0	17	SW11 2	3		
HA0 2	5			SW11 3	8		
HA0 3	3			SW11 4	4		
HA0 4	5			SW11 5	7		
HA1 1	3	HA1	12	SW11 6	4		
HA1 2	2			SW12 0	4	SW12	12
HA1 3	2			SW12 8	2		
HA1 4	5			SW12 9	6		
HA2 0	4	HA2	21	SW13 0	3	SW13	7
HA2 6	3			SW13 9	4		
HA2 7	3			SW14 7	3	SW14	9
HA2 8	5			SW14 8	6		
HA2 9	6			SW15 1	4	SW15	28
HA3 0	5	HA3	27	SW15 2	5		
HA3 5	5			SW15 3	4		
HA3 6	4			SW15 4	4		
HA3 7	4			SW15 5	5		
HA3 8	6			SW15 6	6		
HA3 9	3			SW16 1	6	SW16	37
HA4 0	3	HA4	15	SW16 2	6		
HA4 6	4			SW16 3	4		
HA4 7	2			SW16 4	5		
HA4 8	3			SW16 5	7		
HA4 9	3			SW16 6	9		
HA5 1	1	HA5	10	SW17 0	6	SW17	27
HA5 2	2			SW17 7	7		
HA5 3	2			SW17 8	5		
HA5 4	2			SW17 9	9		
HA5 5	3			SW18 1	3	SW18	22
HA6 1	2	HA6	5	SW18 2	4		
HA6 2	2			SW18 3	3		
HA6 3	1			SW18 4	7		
HA7 1	2	HA7	5	SW18 5	5		
HA7 3	1			SW19 1	6	SW19	34
HA7 4	2			SW19 2	7		
HA8 0	2	HA8	24	SW19 3	5		
HA8 5	7			SW19 4	3		
HA8 6	5			SW19 5	2		
HA8 7	3			SW19 6	5		
HA8 8	2			SW19 7	3		
HA8 9	5			SW19 8	3		
HA9 0	1	HA9	17	SW2 1	4	SW2	24
HA9 6	4			SW2 2	5		
HA9 7	3			SW2 3	4		
HA9 8	5			SW2 4	6		
HA9 9	4			SW2 5	5		
IG1 1	8	IG1	21	SW20 0	5	SW20	12
IG1 2	4			SW20 8	3		

IG1 3	4			SW20 9	4		
IG1 4	5			SW3 1	1	SW3	5
IG10 1	1	IG10	4	SW3 3	1		
IG10 3	2			SW3 5	2		
IG10 4	1			SW3 6	1		
IG11 0	3	IG11	19	SW4 0	3	SW4	15
IG11 7	5			SW4 6	2		
IG11 8	5			SW4 7	4		
IG11 9	6			SW4 8	3		
IG2 6	5	IG2	9	SW4 9	3		
IG2 7	4			SW5 0	1	SW5	5
IG3 8	6	IG3	13	SW5 9	4		
IG3 9	7			SW6 1	3	SW6	28
IG4 5	5	IG4	5	SW6 2	3		
IG5 0	6	IG5	6	SW6 3	4		
IG6 1	2	IG6	10	SW6 4	3		
IG6 2	5			SW6 5	3		
IG6 3	3			SW6 6	5		
IG7 4	3	IG7	6	SW6 7	7		
IG7 5	2			SW7 1	1	SW7	7
IG7 6	1			SW7 2	1		
IG8 0	4	IG8	10	SW7 3	1		
IG8 7	2			SW7 4	3		
IG8 8	2			SW7 5	1		
IG8 9	2			SW8 1	6	SW8	20
IG9 5	1	IG9	3	SW8 2	5		
IG9 6	2			SW8 3	3		
KT1 1	4	KT1	12	SW8 4	5		
KT1 2	3			SW8 5	1		
KT1 3	4			SW9 0	4	SW9	19
KT1 4	1			SW9 6	3		
KT10 0	1	KT10	2	SW9 7	4		
KT10 9	1			SW9 8	4		
KT17 1	2	KT17	2	SW9 9	4		
KT18 7	1	KT18	1	TN16 1	2	TN16	6
KT19 0	3	KT19	5	TN16 2	1		
KT19 8	1			TN16 3	3		
KT19 9	1			TW1 1	3	TW1	13
KT2 5	5	KT2	12	TW1 2	3		
KT2 6	3			TW1 3	3		
KT2 7	4			TW1 4	4		
KT22 7	1	KT22	1	TW10 5	2	TW10	7
KT3 3	5	KT3	16	TW10 6	2		
KT3 4	3			TW10 7	3		
KT3 5	4			TW11 0	1	TW11	10
KT3 6	4			TW11 8	5		
KT4 7	4	KT4	10	TW11 9	4		
KT4 8	6			TW12 1	3	TW12	9
KT5 8	5	KT5	7	TW12 2	5		
KT5 9	2			TW12 3	1		
KT6 4	3	KT6	14	TW13 4	4	TW13	14

KT6 5	3			TW13 5	4		
KT6 6	3			TW13 6	4		
KT6 7	5			TW13 7	2		
KT8 0	2	KT8	8	TW14 0	3	TW14	13
KT8 1	1			TW14 8	5		
KT8 2	3			TW14 9	5		
KT8 9	2			TW15 1	2	TW15	7
KT9 1	4	KT9	9	TW15 2	3		
KT9 2	5			TW15 3	2		
N1 0	5	N1	38	TW16 6	3	TW16	5
N1 1	4			TW16 7	2		
N1 2	5			TW18 1	2	TW18	5
N1 3	3			TW18 3	1		
N1 4	6			TW18 4	2		
N1 5	3			TW19 7	1	TW19	1
N1 6	3			TW2 5	4	TW2	11
N1 7	4			TW2 6	3		
N1 8	3			TW2 7	4		
N1 9	2			TW3 1	5	TW3	16
N10 1	4	N10	13	TW3 2	4		
N10 2	5			TW3 3	4		
N10 3	4			TW3 4	3		
N11 1	5	N11	12	TW4 5	4	TW4	10
N11 2	4			TW4 6	2		
N11 3	3			TW4 7	4		
N12 0	5	N12	14	TW5 0	7	TW5	11
N12 7	2			TW5 9	4		
N12 8	3			TW6 1	0	TW6	1
N12 9	4			TW6 3	1		
N13 4	7	N13	14	TW7 4	3	TW7	14
N13 5	3			TW7 5	3		
N13 6	4			TW7 6	4		
N14 4	4	N14	13	TW7 7	4		
N14 5	4			TW8 0	3	TW8	8
N14 6	5			TW8 8	3		
N15 3	5	N15	22	TW8 9	2		
N15 4	4			TW9 1	4	TW9	11
N15 5	6			TW9 2	3		
N15 6	7			TW9 3	2		
N16 0	4	N16	27	TW9 4	2		
N16 5	2			UB1 1	6	UB1	17
N16 6	8			UB1 2	7		
N16 7	10			UB1 3	4		
N16 8	1			UB10 0	5	UB10	10
N16 9	2			UB10 8	3		
N17 0	5	N17	28	UB10 9	2		
N17 6	8			UB11 1	1	UB11	1
N17 7	5			UB2 4	5	UB2	13
N17 8	5			UB2 5	8		
N17 9	5			UB3 1	4	UB3	16
N18 1	7	N18	15	UB3 2	3		

N18 2	8			UB3 3	3		
N19 3	5	N19	14	UB3 4	4		
N19 4	4			UB3 5	2		
N19 5	5			UB4 0	6	UB4	16
N2 0	4	N2	10	UB4 8	5		
N2 8	3			UB4 9	5		
N2 9	3			UB5 4	4	UB5	15
N20 0	4	N20	6	UB5 5	5		
N20 9	2			UB5 6	6		
N21 1	4	N21	10	UB6 0	5	UB6	21
N21 2	3			UB6 7	3		
N21 3	3			UB6 8	6		
N22 4	2	N22	19	UB6 9	7		
N22 5	5			UB7 0	2	UB7	11
N22 6	5			UB7 7	3		
N22 7	3			UB7 8	3		
N22 8	4			UB7 9	3		
N3 1	4	N3	11	UB8 1	2	UB8	11
N3 2	4			UB8 2	3		
N3 3	3			UB8 3	6		
N4 1	10	N4	27	UB9 5	1	UB9	4
N4 2	7			UB9 6	3		
N4 3	5			W10 4	4	W10	16
N4 4	5			W10 5	6		
N5 1	2	N5	6	W10 6	6		
N5 2	4			W11 1	2	W11	9
N6 4	2	N6	5	W11 2	2		
N6 5	2			W11 3	2		
N6 6	1			W11 4	3		
N7 0	6	N7	23	W12 0	5	W12	23
N7 6	7			W12 7	7		
N7 7	3			W12 8	5		
N7 8	3			W12 9	6		
N7 9	4			W13 0	2	W13	11
N8 0	5	N8	19	W13 8	3		
N8 7	4			W13 9	6		
N8 8	6			W14 0	5	W14	12
N8 9	4			W14 8	5		
N9 0	5	N9	22	W14 9	2		
N9 7	6			W2 1	6	W2	22
N9 8	5			W2 2	3		
N9 9	6			W2 3	3		
NW10 0	5	NW10	46	W2 4	3		
NW10 1	5			W2 5	4		
NW10 2	8			W2 6	3		
NW10 3	2			W3 0	3	W3	22
NW10 4	9			W3 6	7		
NW10 5	5			W3 7	5		
NW10 6	2			W3 8	4		
NW10 7	2			W3 9	3		
NW10 8	4			W4 1	4	W4	17

NW10 9	4			W4 2	4		
NW11 0	2	NW11	12	W4 3	5		
NW11 6	2			W4 4	2		
NW11 7	3			W4 5	2		
NW11 8	2			W5 1	4	W5	17
NW11 9	3			W5 2	2		
				W5 3	4		
				W5 4	5		
				W5 5	2		
				W6 0	2	W6	13
				W6 7	3		
				W6 8	3		
				W6 9	5		
				W7 1	4	W7	12
				W7 2	3		
				W7 3	5		
				W8 4	2	W8	8
				W8 5	3		
				W8 6	3		
				W9 1	5	W9	15
				W9 2	4		
				W9 3	6		
				WD17 1	1	WD17	3
				WD17 2	2		
				WD18 7	1	WD18	1
				WD19 4	1	WD19	1
				WD23 1	3	WD23	4
				WD23 3	1		
				WD6 1	3	WD6	7
				WD6 3	1		
				WD6 4	3		
				TOTAL	3228		

SIGNED by
For and on behalf of c2c Rail Limited

SIGNED by
For and on behalf of The Chiltern
Railway Company Limited

SIGNED by
For and on behalf of First Capital
Connect Limited

SIGNED by
For and on behalf of First Greater
Western Limited

SIGNED by
For and on behalf of London Eastern
Railway Limited

SIGNED by
For and on behalf of London & South
Eastern Railway Company

SIGNED by
For and on behalf of Southern
Railway Limited

SIGNED by
For and on behalf of London & Birmingham Railway Limited

SIGNED by
For and on behalf of Stagecoach South
Western Trains Limited

SIGNED by
For and on behalf of
TRANSPORT TRADING LIMITED