



Dated 27 March 2013

- (1) London Bus Services Limited
- (2) Wrightbus Limited

Contract No. 4600002359 / 4600003109
(Tender reference PRO1632)

Amended and Restated Design and Supply and Maintenance of Double
Decker Bus Vehicles Contract

CONTENTS

	Page
1	DEFINITIONS AND INTERPRETATION2
2	COMMENCEMENT 14
3	PURPOSE OF CONTRACT 14
4	DESIGN APPROVAL PROCESS AND DRAWINGS 19
4A	VALUE ENGINEERING..... 18
5	PRODUCTION OF PROTOTYPE VEHICLE20
6	QUALIFIED ACCEPTANCE22
7	SUPPLY OF PRODUCTION VEHICLES24
7A	2012 PRODUCTION VEHICLE ORDER.....25
8	VEHICLE CERTIFICATION36
9	SUPPLY OF SPARE PARTS.....36
10	EXTENSIONS TO THE DELIVERY DATE37
11	LIQUIDATED DAMAGES FOR LATE DELIVERY39
12	OPERATING INFORMATION AND TRAINING PROGRAMME40
13	QUALITY ASSURANCE41
14	LIMITED WARRANTIES41
15	PROPERTY TO PASS AND TRANSFER OF RISK.....46
16	MAINTENANCE AND SERVICING.....46
17	PAYMENT TERMS AND VALUE ADDED TAX47
18	SET OFF.....51
19	FREE ISSUE GOODS OR MATERIALS.....51
20	CONTRACT MANAGEMENT51
21	SUB-CONTRACTING AND CHANGE OF OWNERSHIP53
22	CONFLICT OF INTEREST54
23	RIGHTS OF ACCESS.....55
24	ADDITIONAL WARRANTIES AND UNDERTAKINGS.....55
25	COMPLIANCE WITH LAWS AND OTHER RULES56
26	CONFIDENTIALITY AND ANNOUNCEMENTS58
27	FREEDOM OF INFORMATION.....61
28	INTELLECTUAL PROPERTY64
29	AMBUSH MARKETING72
30	RECORDS72
31	BEST VALUE AND RESPONSIBLE PROCUREMENT73
32	INDEMNITY, INSURANCE & LIMITATION OF LIABILITY73
33	TERMINATION77
34	CONSEQUENCES OF TERMINATION.....81
35	VARIATIONS84
36	CORRUPT GIFTS AND PAYMENT OF COMMISSION84

37	WAIVER.....	84
38	ENTIRE AGREEMENT	85
39	RELATIONSHIP OF THE PARTIES	86
40	SEVERABILITY	86
41	SURVIVAL	87
42	NOTICES.....	87
43	LANGUAGE.....	87
44	THE CONTRACTS (RIGHTS OF THIRD PARTIES) ACT 1999	87
45	ASSIGNMENT AND NOVATION.....	88
46	GOVERNING LAW	89
47	DISPUTE RESOLUTION	89
48	COUNTERPARTS.....	90

Schedules

1	SPECIFICATION FOR DOUBLE DECKER BUS VEHICLES	92
2	PROJECT MILESTONES	151
3	VEHICLE INSPECTION REPORT.....	153
4	PRICE SUMMARY AND PAYMENT SCHEDULE	160
5	VEHICLE OPERATORS.....	164
6	TERMS OF SUPPLY OF PRODUCTION VEHICLES TO THE COMPANY.....	165
7	VEHICLE WARRANTY AND SPARE PARTS WARRANTY	168
8	SPARE PARTS ORDERING AND DELIVERY PROCEDURE	171
9	STANDARD TERMS OF SALE FOR SPARE PARTS.....	174
10	WORKPLACE HARASSMENT POLICY	175
11	BACKGROUND INTELLECTUAL PROPERTY	187
12	PROCEDURE COVERING VARIATIONS FROM CONTRACT.....	188
13	RESPONSIBLE PROCUREMENT AND STRATEGIC LABOUR NEEDS AND TRAINING.....	199
14	MAINTENANCE AND SUPPORT SERVICES.....	208
15	ANTICIPATED CHANGES IN LAW	212
16	FORM OF PARENT COMPANY GUARANTEE	213
17	2012 ORDER PRODUCTION PROGRAMME	218
18	OPERATIONAL PERFORMANCE TARGETS.....	219
19	INFORMATION REPORTING.....	220
20	LETTER TO COMPANY PURSUANT TO CLAUSE 7A.9	221
21	DEED OF PRIORITY	223
22	FINAL VEHICLE DESIGNS	225

THIS DESIGN AND SUPPLY AND MAINTENANCE OF DOUBLE DECKER BUS VEHICLES CONTRACT (this “**Contract**”) is made the 27th Day of March 2013

BETWEEN

- (1) **LONDON BUS SERVICES LIMITED** a company registered in England and Wales under the number 03914787 and having a registered office at Windsor House, 42-50 Victoria Street, London SW1H 0TL (the “**Company**”); and
- (2) **WRIGHTBUS LIMITED** a company registered in Northern Ireland under the number NI006119 whose registered office is at Galgorm Industrial Estate, Fenaghy Road, Galgorm, Ballymena, County Antrim BT42 1PY (the “**Contractor**”).

BACKGROUND

- (A) The Company wishes to facilitate the introduction of new double decker buses to be operated on bus routes in London.
- (B) The Company has conducted a tender process to identify a supplier who is able to:
 - (i) design such vehicles to meet the Company’s requirements; and
 - (ii) supply those vehicles to the Company and bus operators operating in London; and
 - (iii) to maintain those vehicles for the Company and those operators.
- (C) As a result of the tendering process and on the basis of the Contractor’s responses submitted during the tendering process, the Company has agreed to enter into this Contract with the Contractor and the Contractor agrees to supply the Vehicles and provide maintenance services for such Vehicles and other services on and subject to the terms and conditions of this Contract.
- (D) The Contractor acknowledges that the Company has relied upon the expertise and skills set out in the Contractor’s responses submitted during the tendering process in selecting the Contractor.
- (E) On 20 September 2012, the Company secured the approval of its Board to purchase up to 600 Vehicles and this Contract has been amended accordingly. Eight of those 600 Vehicles have already been produced and

purchased by the Company in accordance with the terms of a letter dated 1 March 2013.

IT IS AGREED as follows:

DEFINITIONS AND INTERPRETATION

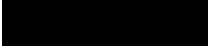
1.1 In this Contract the following expressions shall have the following meanings unless the context otherwise requires:

“Anticipated Change in Law” means (a) any regulatory and/or legislative changes reasonably anticipated to become a legal requirement within 24 months of the Effective Date (including those notified by the Contractor to the Company in accordance with Schedule 15), or (b) any proposed change in Law which the Contractor should reasonably be aware of at the date of this Contract, including any changes that are under consultation and have not been finalised at the date of this Contract, such as Euro 6. In each case including any change or requirement evidenced by publication prior to the date of this Contract (i) in a draft Bill as part of a Government Departmental White Paper, (ii) in a Bill, (iii) in a draft statutory instrument, (iv) as a proposal in the Official Journal of the European Communities, (v) in any applicable judgment of a relevant court of law or (vi) in any relevant guidance with which the Contractor is bound to comply;

“Authorized Non-Witnessed Tests” has the meaning set out in Clause 5.5.2;

“Background Intellectual Property” has the meaning set out in Clause 28.1;

“Business Day” any day excluding Saturdays, Sundays and public or bank holidays in England or

	Northern Ireland;
“Change of Control”	has the meaning set out in Clause 21.3;
“Company”	the Company (defined above), including its permitted successors and assigns;
“Company Affiliates”	the other members of the TfL Group and GLA Bodies (i.e. excluding the Company);
“Company Manager”	the Company’s Operations Director or such other person as may be notified by the Company to the Contractor from time to time;
“Company Marks”	the Company’s (and/or those of the Company Affiliates’) trademarks, logos and trade names including without limitation the London Underground “Roundel” and the New Johnson typeface;
“Company Project Manager”	the person notified as such by the Company to the Contractor from time to time;
“Company Technical Manager”	the person notified as such by the Company to the Contractor from time to time;
“Confidential Information”	has the meaning set out in Clause 26.2;
“Contract”	this Contract (as defined above) with the Schedules and such other documents (or parts thereof) referred to in this Contract;
“Contractor”	the Contractor (as defined above), including its permitted successors and assigns;
“Contractor Marks”	the Contractor’s (and the Contractor’s suppliers’) trademarks, logos, and trade names;
“Contractor’s Representative”	 Wrightbus Limited or such other person as may be agreed by the

	Parties from time to time;
“Delay Event”	has the meaning set out in Clause 10.1;
“Drawings”	the design drawings for the Vehicles to be delivered in accordance with Clause 4.2;
“Early Termination Charges”	means the design, labour, materials, tooling and machining costs and overheads incurred or to which the Contractor has committed together with an amount to reflect the Contractor’s loss of profit for all Vehicles ordered by the Company under this Contract but not delivered and paid for in full pursuant to this Contract as a direct result of the termination of this Contract in accordance with Clause 33.1 (the latter head being agreed by the Parties or in default of agreement determined in accordance with Clause 47) in both cases as of the date of service of notice by the Company in accordance with Clause 33.1;
“Effective Date”	13 January 2010;
“EU Legislation”	delegated or subordinated legislation or legislative act(s) of the Council of the European Union or the European Commission (or any interpretation of the foregoing) which (without further enactment) has legal effect within the United Kingdom;
“Euro 6”	Regulation (EC) No 715/2007 of the European Parliament and of the Council of 20 June 2007 on type approval of motor vehicles with respect to emissions from light passenger and commercial vehicles (Euro 6) and on access to vehicle repair and maintenance information;

“Exterior Features”	has the meaning set out in Clause 28.4;
“Exterior Features Intellectual Property”	has the meaning set out in Clause 28.4;
“Final Vehicle Designs”	has the meaning set out in Clause 4.3.1;
“Final Vehicle Designs Approval Notice”	has the meaning set out in Clause 4.3.2;
“FOI Legislation”	has the meaning set out in Clause 27.1.1;
“Force Majeure Event”	any of the following: riot, civil unrest, war, act of terrorism, threat or perceived threat of act of terrorism, fire, earthquake, extraordinary storm, flood, abnormal weather conditions or other natural catastrophe or strikes, lockouts or other industrial disputes to the extent that such event has materially affected the ability of the Party relying on the Force Majeure Event (“Affected Party”) to perform its obligations in accordance with the terms of this Contract but excluding any such event insofar as it arises from or is attributable to the wilful act, omission or negligence of the Affected Party or the failure on the part of the Affected Party to take reasonable precautions to prevent such Force Majeure Event or its impact or is the failure of the Contractor to provide finance to meet its obligations under this Contract;
“Foreground Intellectual Property”	has the meaning set out in Clause 28.2;
“Future Operations”	has the meaning set out in Clause 28.6.1;
“GLA Bodies”	the Greater London Authority and its functional bodies (as may change from time to time, but at the Effective Date of this Contract: the Metropolitan Police Authority;

the London Development Agency and the London Fire Emergency Planning Authority);

“Health and Safety Laws”

all relevant laws and regulations, including, but not in any respect limited to, the Health and Safety at Work etc. Act 1974, the Management of Health and Safety at Work Regulations 1999 and other relevant safety regulations, codes of practice or guidance documents provided they have legal force and effect;

“Initial Production Period”

the first 12 months of production of the Production Vehicles, commencing on the date of this Contract;

“Insolvency Event”

any of the following:

- (a) the Contractor or the Company making any voluntary arrangement with its creditors under part 1 of the Insolvency Act 1986;
- (b) a receiver, administrative receiver or manager being appointed over all or a substantial part of the business of the Contractor or the Company;
- (c) a petition being presented for the compulsory winding-up of the Contractor or the Company or an application being made for the appointment of an administrator over the Contractor or the Company;
- (d) the Contractor or the Company having passed a resolution for its winding-up (except for the purposes of a voluntary amalgamation, reincorporation, reconstruction or

other solvent re-organisation);

- (e) the Contractor or the Company ceasing to carry on its business for any reason and/or being unable to pay its debts within the meaning of the Insolvency Act 1986;
- (f) any similar event to those in (a) to (e) above occurring in relation to the Contractor or the Company under the laws of any applicable jurisdiction for those purposes;

**“Intellectual Property” or
“Intellectual Property
Rights”**

any and all patents, business processes, copyrights, data and database rights, software (including source code and object code), design rights, trade marks, trade names, service marks, service names, moral rights, Know-How or any other similar proprietary right whether registered or unregistered and including applications for the grant of any such rights arising or enforceable under the laws of the United Kingdom, any other jurisdiction anywhere in the world, or any bi-lateral or multi-lateral treaty regime;

“Interior Features”

has the meaning set out in Clause 28.3;

**“Interior Features
Intellectual Property”**

has the meaning set out in Clause 28.3;

“Know-How”

all know-how, methods, techniques, drawings, designs, and technical information;

“Law”

any:

- (a) statute, statutory instrument, by-law, order, regulation, directive, treaty, decree or

law;

(b) rule, policy, guidance or recommendation issued by any governmental, statutory or regulatory body;

(c) industry code of conduct or guideline; and/or

(d) EU Legislation;

“Liability Cap” shall have the meaning set out in Clause 32.3.1.2;

“Limited Warranties” the Vehicle Warranty and the Spare Parts Warranty;

“Marks” the Contractor Marks and the Company Marks;

“Operating Information” the operating manual, maintenance manual, spare parts catalogues and similar operating and maintenance instructions for the Vehicles, including such information specified in the Specification;

“Operational Performance Targets” the targets set out in Schedule 18;

“Parties” the parties to this Contract and any permitted successors and assignees and “Party” shall mean whichever of them is indicated by the context of the reference;

“Performance Data” the following performance data regarding each Vehicle: (i) operating hours, (ii) total fuel consumption, (iii) average fuel consumption, (iv) percentage availability, (v) maintenance hours, (vi) component lifetimes, (vii) start-up times for Vehicles, (viii) results of any emissions tests carried out by the Company and (ix) such other information as

the Parties may agree in writing (such agreement not to be unreasonably withheld or delayed);

“Product”

any product supplied or to be supplied by the Contractor under this Contract, including Spare Parts and Vehicles;

“Production Programme”

means the schedule for the delivery of 600 vehicles ordered under clause 7A.1 as set out in Schedule 17 to this Contract as may be amended from time to time in writing between the Company and the Contractor provided such written amendment is signed by either one director of each of the Company and the Contractor or by the Company Manager for the Company and the Contractor’s Representative for the Contractor;

“Production Site”

the site or premises where a Production Vehicle (or any part) is being manufactured;

“Production Tests”

all tests that are to be carried out on a Production Vehicle prior to delivery that are necessary to enable a Production Vehicle Inspection Report to be properly completed and issued in respect of each Production Vehicle, including statutory tests, track tests and those tests specified in the Specification and Part 2 of Schedule 1 (to the extent that they apply pre-delivery), as may be amended in accordance with Clause 35 from time to time;

“Production Vehicle Delivery Period”

the period set out in paragraph 2 of Schedule 6 being the maximum permitted period between the issuance of a purchase order for a Production Vehicle and delivery of that Production Vehicle;

“Production Vehicle Delivery Site”	The site to which the relevant Production Vehicles are to be delivered in accordance with this Contract being an address in London notified by the Company to the Contractor;
“Production Vehicle Inspection Report”	an inspection report substantially in the form set out in Schedule 3 relating to the Production Tests;
“Production Vehicles”	the double decker bus vehicles which comply with the Specification and which are to be supplied by the Contractor under or pursuant to this Contract in accordance with Clause 7 and any Variant Vehicles;
“Project Milestones”	the project timetable and milestones set out in Schedule 2 as amended in accordance with Clause 35 from time to time;
“Project Plan”	the project management plan agreed by the Parties in accordance with Clause 3.2 which shall confirm the (a) reasonable steps required to meet each Project Milestone in accordance with the timescales for each Project Milestone set out in Schedule 2, and (b) reasonable obligations of each of the Parties in respect thereof;
“Prototype Delivery Site”	the site to which the Prototype Vehicle is to be delivered in accordance with this Contract being an address in London notified by the Company to the Contractor or such other address in the United Kingdom as the Company may notify the Contractor from time to time;
“Prototype Tests”	all tests required to be carried out on the Prototype Vehicles to enable a Prototype Vehicle Inspection Report to be properly completed and issued in respect of each

Prototype Vehicle, including statutory tests, track tests and those tests set out in the Specification;

“Prototype Vehicle”	one prototype double decker bus vehicle to be supplied under this Contract in accordance with Clause 5;
“Prototype Vehicle Delivery Date”	the date specified in the Project Milestones by which the Prototype Vehicle is to be delivered to the Company by the Contractor in accordance with this Contract;
“Prototype Vehicle Inspection Report”	an inspection report substantially in the form set out in Schedule 3 relating to the Prototype Tests;
“PV Delivery Site”	the site for delivery of the Production Vehicle as specified in the relevant purchase order;
“Qualified Production Vehicles”	has the meaning set out in Clause 6.1.2;
“Rear Platform Intellectual Property”	has the meaning set out in Clause 28.6.2;
“Remediation Plan”	the Contractor’s plan for the remedy of any material or persistent breach of this Contract to be prepared in accordance with Clause 33.2.3;
“Responsible Procurement Policy”	the Company’s Responsible Procurement Policy as amended from time to time a copy of the current version of which is on the Framework Employer’s website at http://www.TfL.gov.uk/assets/downloads/businessandpartners/GLAResponsibleProcurementPolicy.pdf ;
“Spare Parts”	replacement components for use in the Vehicles and to be supplied by the

	Contractor under this Contract;
“Spare Parts Warranty”	the warranty relating to the Spare Parts set out in Schedule 7;
“Specification”	the specification drawings, the performance requirements, the build requirements and any other requirements set out in Part 1 of Schedule 1 as may be amended from time to time in accordance with Clause 35;
“TfL”	Transport for London, a statutory corporation established under the Greater London Authority Act 1999;
“TfL Group”	TfL and any subsidiary (as defined in section 1159 of the Companies Act 2006) thereof from time to time including the Company and reference to any “member of the TfL Group” shall refer to TfL or any such subsidiary;
“Third Party Product”	has the meaning set out in Clause 28.2.3;
“Third Party Warranties”	has the meaning set out in Clause 14.7;
“Unique Spare Parts”	the spare parts that are unique to the Vehicles as set out in Schedule 4;
“Variant Vehicle”	a variant of the double decker bus vehicle set out in the Specification that has some of the unique features of such double decker bus vehicle as agreed pursuant to Clause 35. Where a Variant Vehicle is agreed, all references in this Contract to Production Vehicles shall be deemed to include Variant Vehicles;
“VAT”	value added tax as provided for in the Value Added Tax Act 1994 and any tax replacing the same or of a similar nature;
“Vehicle Maintenance and	the corrective service and preventive

Support”	maintenance and support services set out in Schedule 14;
“Vehicle Operator”	a third party company under contract with the Company to operate bus services in London from time to time, such operators at the date of this Contract being listed in Schedule 5, or any third party who in the ordinary course of its business provides buses to such operators;
“Vehicles”	the Prototype Vehicles and the Production Vehicles and the Variant Vehicles;
“Vehicle Warranty”	the warranty relating to the Vehicles set out in Schedule 7 (excluding the Contractor’s testing vehicle).

In this Contract:

- 1.2 a reference to the singular includes the plural and vice versa, and a reference to any gender includes all genders;
- 1.3 a reference to any statute, enactment, order, regulation or other similar instrument shall be construed as a reference to the statute, enactment, order, regulation or instrument as amended or re-enacted by any subsequent statute, enactment, order, regulation or instrument and shall include all statutory instruments or orders made pursuant to it whether replaced before or after the date of this Contract;
- 1.4 a reference to any document other than as specified in Clause 1.3 shall be construed as a reference to the document on the Effective Date, except as expressed otherwise in this Contract or modified pursuant to Clause 35 (Variations);
- 1.5 headings are included in this Contract for ease of reference only and do not affect the interpretation or construction of this Contract;
- 1.6 references to Clauses and Schedules are, unless otherwise provided, references to clauses of, and schedules to, this Contract 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 in respect of the eight Vehicles already purchased by the Company in accordance with the terms of a letter dated 1 March 2013, to the extent of any conflict between the terms of that letter and the terms of this Contract, the terms of that letter shall prevail;
- 1.9 the Schedules form part of this Contract and will have the same force and effect as if expressly set out in the body of this Contract;
- 1.10 the expression “person” means any individual, firm, body corporate, unincorporated association, partnership, government, state or agency of a state or joint venture;
- 1.11 any reference to ‘life’ of the Vehicles shall mean a minimum operational life of 14 years from the date of delivery or acceptance, whichever is the later; and
- 1.12 the words “including”, “includes” and “included” will be construed without limitation.

2. **COMMENCEMENT**

This Contract shall commence on and include the Effective Date and shall continue in force unless terminated earlier in accordance with the provisions of Clause 33 (Termination).

3. **PURPOSE OF CONTRACT**

- 3.1 The Contractor agrees:
 - 3.1.1 to design a double decker bus vehicle in accordance with the Specification and in accordance with Clause 4;
 - 3.1.2 to manufacture and produce Prototype Vehicles to the design referred to in Clause 3.1.1 and in accordance with Clause 5;
 - 3.1.3 following the Prototype Vehicle successfully passing the Prototype Tests in accordance with Clause 5 or the issuance of a qualified Prototype Vehicle Inspection Report in accordance with Clause 6.1, to manufacture and supply Production Vehicles to the Company and/or Vehicle Operators in accordance with Clause 7;

- 3.1.4 to manufacture and supply Spare Parts for Production Vehicles to the Company and Vehicle Operators of Production Vehicles throughout the life of such Production Vehicles in accordance with Clause 9;
- 3.1.5 to provide maintenance services for Production Vehicles throughout the life of such Production Vehicles and other services, each in accordance with Clause 16.
- 3.2 The Contractor shall prepare and submit to the Company for approval a draft Project Plan by no later 05 February 2010 or such later date as may be agreed by the Parties in writing. The Parties shall promptly meet to review and discuss the draft Project Plan and shall use reasonable endeavours to agree in good faith the final Project Plan by no later than the Project Milestone date for the Project Plan set out in Schedule 2. The period for approval by the Company of Project Milestones 2, 4 and 6 shall be fifteen (15) Business Days. All other periods for approval of Project Milestones by the Company shall be as set out in the Project Plan.
- 3.3 In consideration for the Contractor performing its obligations under this Contract, the Company shall pay the Contractor the sums specified in Schedule 4 such sums to be payable as set out in Schedule 4 and Clause 17.

4. **DESIGN APPROVAL PROCESS AND DRAWINGS**

- 4.1 The Contractor shall design a double decker bus vehicle to comply in all respects with the Specification and provided the Contractor complies with its obligations under this Contract the Company shall pay for such design in accordance with Clause 17. The Contractor will ensure that the design will comply not only with the Specification but in addition with all current regulatory and legislative requirements and with all Anticipated Changes in Law. In addition, the Contractor shall use its reasonable endeavours to design such double decker bus vehicle in such a way that it meets the Operational Performance Targets when in operation.
- 4.2 At points during the course of the design process as the Company specifies, the Contractor shall organise and attend individual or collective meetings with the Company and such relevant third parties as the Company may reasonably require. During such meetings the Contractor shall provide appropriate updates to such parties in relation to the progress of the design. The Contractor will ensure that the design and the production of the Drawings and other deliverables specified in the Specification relating to the design are

undertaken as specified in the Project Milestones and that the Drawings and other deliverables are made available in accordance with the Project Plan.

4.3

4.3.1 On or before the date set out in the Project Plan, the Parties shall participate in a final design review meeting for the purpose of reaching agreement with respect to the final designs (the “**Final Vehicle Designs**”) which shall:

4.3.1.1 comply with the Specification;

4.3.1.2 set out the final specifications, plans and drawings for vehicle branding.

4.3.1.A It is acknowledged that the Contractor supplied the Final Vehicle Designs prior to the date of this Contract and are included in Schedule 22.

4.3.2 The Company shall after the execution of this Contract promptly deliver a written notice to the Contractor stating the Company has approved the Final Vehicle Designs (the “**Final Vehicle Designs Approval Notice**”).

4.3.A Prior to the date of this agreement the Parties shall have jointly inspected the Prototype Vehicle and seven Production Vehicles delivered to the Company during 2012 and the Contractor shall subsequently compile a comprehensive record of all issues related to the Vehicles’ performance and compliance with the Specification, together with a record of the actions necessary to rectify such issues.

The Contractor has supplied such records prior to the date of this Contract and shall consider any comments the Company may make on them. The Contractor shall promptly undertake the actions identified in such records (as may have been amended by the Company) and the Parties agree that the payment by the Company in respect of Project Milestones 6B and 10 shall be subject to the completion of all such actions to the Company’s reasonable satisfaction.

4.4

4.4.1 The Contractor shall deliver the static mock up to the Company in accordance with the Project Milestones and the Specification.

4.4.2 The Contractor shall be responsible for the accuracy of all specifications, plans, drawings and technical information prepared or approved by the Contractor for the purposes of this Contract, whether such specifications, plans, drawings or technical information are prepared or supplied by the Contractor or the Company or any other person and any expression or approval by the Company of any specification, plan, drawing or technical information including the issuance of the Final Vehicle Designs Approval Notice under Clause 4.3.2 shall not relieve the Contractor of such responsibility or from the full compliance with the provisions and requirements of this Contract.

4.4.3 In any case where the Contractor is of the opinion that any specification, plan, drawing or technical information contained in the Specification should for any reason be amended or not followed or observed, the Contractor shall notify the Company setting out its reasons and follow the procedures set out in Clause 35 and Schedule 12. No amendment or departure shall be made to or from such specification, plan, drawing or technical information contained in the Specification without the prior written authority of the Company provided that the giving of such authority shall not relieve the Contractor of its obligations or liabilities under this Contract; provided, however, the Company shall not withhold consent to a change or modification if reasonably required to comply with applicable Law.

4.5 The Contractor shall manufacture the Production Vehicles in accordance with the Final Vehicle Designs and Clause 7. Any additional changes to the Final Vehicle Designs after issuance of the Final Vehicle Designs Approval Notice shall only be made pursuant to the change order procedures set out in Clause 35 and Schedule 12.

4.6 Changes in Law:

4.6.1 All changes to this Contract, including to the Specification, the price and the design, manufacture and supply of the Vehicles and Spare Parts shall be dealt with in accordance with Clause 35.

- 4.6.2 The Contractor shall be responsible for the costs of implementing any Anticipated Changes in Law in relation to its obligations under this Contract and the design, manufacture and supply of the Vehicles and Spare Parts.
- 4.6.3 In relation to any change in Law, which is not an Anticipated Change in Law and which involves or requires a substantial change to the design, manufacture and/or supply of the Vehicles and Spare Parts together with a significant impact on the costs incurred by the Contractor, each Party shall be responsible for the costs of such change as agreed in accordance with Clause 35, provided that the Contractor shall use reasonable endeavours to mitigate the costs relating to such changes in Law, including by:
- 4.6.3.1 providing evidence that it has used reasonable endeavours to minimise and to oblige its sub-contractors to minimise any increase in costs and to maximise any reduction in costs;
 - 4.6.3.2 providing evidence as to how the change in Law has affected prices charged by similar businesses;
 - 4.6.3.3 providing evidence (to the extent it is legally able to do so) that the costs the Company (or a Vehicle Operator) agrees to bear are no greater than the costs which any other customer of the Contractor is to bear as a result of the change in Law;
 - 4.6.3.4 demonstrating that it has taken into account any expenditure that has been avoided as a result of the change in Law; and
 - 4.6.3.5 changing the way in which it performs its obligations under this Contract.
- 4.6.4 For the avoidance of doubt, if a change in Law results in a saving in the costs under this Contract, the prices set out in Schedule 4 shall be reduced accordingly and recorded in accordance with Clause 35.

4A. **VALUE ENGINEERING**

4A.1 The Parties agree that it may be mutually beneficial to work together to seek to make the supply of Vehicles more efficient and to reduce the cost of production, whether through changes in design, components, production processes or otherwise, and agree to establish a working group with members from both the Company and the Contractor to investigate appropriate opportunities for efficiency, recognising the need to maintain the essential characteristics of the Vehicles and provided always that no change may be made to Specification or any other provision of this Contract without complying with the requirements of Clause 35 and Schedule 12.

4A.2 The Parties shall work together to seek to ensure that the percentage degradation in performance of Production Vehicles between the test environment and operational environment is no less than the percentage degradation of other hybrid buses between their test environment and operational environment.

4A.3 The Company Project Manager and the Contractor's Representative shall together undertake during the first four months of 2014 a formal review of the scope for efficiencies in the supply of Vehicles and produce a joint report for the Parties from such review not later than 30 April 2014.

4A.4 For the purpose of ensuring a clear cost base from which efficiencies may reasonably be calculated and costs determined (as the case may be) in accordance with Schedule 12 the Contractor shall, in respect of the 25th, 100th, 250th and 450th Production Vehicles supplied pursuant to Clause 7A, record clearly the following:

4A.4.1 the bill of materials and prices for that Vehicle;

4A.4.2 the hours and cost of labour for production of that Vehicle; and

4A.4.3 the remainder of the price for that Vehicle, broken down to show overhead costs and profit,

such clear record in each case to be shown to the Company Project Manager and then sealed and stored securely at the Contractor's premises. In the event of any further change made in accordance with Clause 35 and

Schedule 12 or a change of the type described in Clause 4A.5, a further clear record of such information shall be prepared and stored in the same way.

4A.5 Where the Contractor makes any change to the way in which it produces the Vehicles that reduces its costs but does not require any change to the terms of this Contract, the cost of implementing such change (if any) shall be borne by the Contractor and the benefit of such reduction shall accrue to the Contractor and the Company shall not be entitled to any share of it.

4A.6 For the avoidance of doubt nothing in this Clause 4A shall relieve either Party from the requirement to the comply with Clause 35 and Schedule 12 when seeking to make a change to the terms of this Contract and payment in respect of any such change shall be calculated and made in accordance with the provisions of Schedule 12.

5. **PRODUCTION OF PROTOTYPE VEHICLE**

5.1 Following issuance of the Final Vehicle Designs Approval Notice, the Contractor will manufacture and supply to the Company the Prototype Vehicle in accordance with this Clause 5 and the Specification.

5.2 Prior to delivering the Prototype Vehicle to the Company, the Contractor shall carry out the Prototype Tests as set out in Clause 5.5.

5.3 The Contractor shall give the Company Project Manager and representatives of the Vehicle Operators nominated by the Company access to the Contractor's site to observe the Prototype Tests. If the Prototype Vehicle is being manufactured on other premises the Contractor shall obtain for the Company Project Manager and the representatives of the Vehicle Operators permission to observe the Prototype Tests at the premises where the Prototype Vehicle is being manufactured.

5.4 All Prototype Tests shall be undertaken at the Contractor's expense, but the Company shall pay the expenses of the Company Project Manager or his designee attending the tests and the Vehicle Operators shall pay the expenses of their representatives attending the tests.

5.5 Prototype Tests.

5.5.1 The Contractor shall carry out all of the Prototype Tests on the Prototype Vehicle.

- 5.5.2 The Contractor shall give the Company Project Manager a minimum of ten (10) Business Days written notice of the dates and places at which the Prototype Tests will be conducted on a Prototype Vehicle by the Contractor, provided, however, that the Company may at its sole discretion postpone the date of the Prototype Tests to a date no later than fifteen (15) Business Days after the date notified by the Contractor to the Company Project Manager. Should the Company not request postponement, the Contractor may proceed with any test set out in the Specification without the presence of the Company Project Manager or authorised representatives of Vehicle Operators if the above notice has been provided to the Company Project Manager ("**Authorized Non-Witnessed Tests**"). The Parties acknowledge that the Prototype Tests are expected to take place at the Contractor's business premises or an approved testing facility in the United Kingdom. The Contractor will notify the Company if the Prototype Vehicle has passed or failed the Authorized Non-Witnessed Tests.
- 5.5.3 Upon a Prototype Vehicle passing all of the necessary Prototype Tests (including any Authorized Non-Witnessed Tests), then the Company Project Manager shall issue a Prototype Vehicle Inspection Report to that effect to the Contractor within one (1) Business Day of the Prototype Vehicle passing its Prototype Tests.
- 5.5.4 If after observing the Prototype Tests for a Prototype Vehicle, the Company Project Manager reasonably determines that the Prototype Vehicle or any part does not pass the Prototype Tests, or upon notification from the Contractor that the Prototype Vehicle has failed the Authorized Non-Witnessed Tests, the Company Project Manager may reject the Prototype Vehicle or any part by issuing a Prototype Vehicle Inspection Report stating the grounds upon which the decision is based. Following receipt of any such rejection, the Contractor shall make good all failures, including by repairing or replacing any non-compliant or defective parts and resubmit the same for test or inspection in accordance with this Clause 5. All expenses reasonably incurred by the Company or Vehicle Operators in consequence of such re-testing or inspection shall be recoverable by the Company and the Vehicle Operators from the Contractor.

5.5.5 The provisions of this Clause shall not release the Contractor from any of its obligations under this Contract.

5.6 Delivery of Prototype Vehicles

5.6.1 The Contractor shall not deliver the Prototype Vehicle to the Prototype Delivery Site unless the Contractor has been issued a Prototype Vehicle Inspection Report by the Company indicating that the Prototype Vehicle has successfully passed the Prototype Tests.

5.6.2 Following receipt of the Prototype Vehicle Inspection Report by the Contractor indicating that a Prototype Vehicle has successfully passed the Prototype Tests the Contractor will deliver the Prototype Vehicle to the Company at the Prototype Delivery Site. The Contractor will ensure that such delivery takes place in accordance with the Project Milestones and in any event no later than the Prototype Vehicle Delivery Date. Title to the Prototype Vehicle will pass to the Company on delivery. Title to the static mock up will pass to the Company on payment but risk will remain with the Contractor until delivery.

5.7 The Contractor shall maintain written documentation during the term of this Contract and for a period of 14 years after delivery or acceptance (whichever is the later) of the last Vehicle pursuant to this Contract properly demonstrating that the Prototype Tests have been carried out and successfully passed by the Prototype Vehicle. The Contractor will provide the Company with copies of such documentation in accordance with the Specification.

6. **QUALIFIED ACCEPTANCE**

6.1 If by 31 October 2011 (or such other date as may be agreed by the Parties in writing) the Prototype Vehicle is not fully compliant with the Specification, but is compliant with all applicable Laws and Anticipated Changes in Law, then the Company may, in its entire discretion, by written notice to the Contractor:

6.1.1 issue a qualified Prototype Vehicle Inspection Report to the Contractor containing a list of failures, defects and defaults to be rectified by the Contractor to meet the Specification; and

6.1.2 subject to the terms of this Clause 6, require the Contractor to manufacture and supply Production Vehicles in accordance with the qualified Prototype Vehicle Inspection Report (the “**Qualified Production Vehicles**”) and this Contract,

1.1.1 and the Contractor agrees to supply the Qualified Production Vehicles to the Company and Vehicle Operators in accordance with the terms of this Contract and any reference to Production Vehicles will be deemed to include Qualified Production Vehicles, as applicable.

6.2 Notwithstanding the issuance of the qualified Prototype Vehicle Inspection Report, the Contractor shall:

6.2.1 promptly make good any failure to comply with the Specification, including by repairing or replacing any non-compliant or defective parts, and resubmit the Prototype Vehicle for testing or inspection in accordance with Clause 5.5; and

6.2.2 ensure that once a failure, defect or default has been rectified on the Prototype Vehicle so that it is compliant with the Specification, the qualified Prototype Vehicle Inspection Report is updated and all Qualified Production Vehicles are repaired and/or modified, as appropriate. For the avoidance of doubt, the Contractor will repeat this process until the Prototype Vehicle is fully compliant with the Specification.

6.3 Unless and until the non-compliance of the Qualified Production Vehicles has been fully rectified to the reasonable satisfaction of the Company, the Company or a Vehicle Operator shall be entitled to retain five percent (5%) of the price of each Qualified Production Vehicle ordered by the Company or the Vehicle Operator.

6.4 If the non-compliance of the Prototype Vehicle with the Specification has not been rectified (and applied to all Qualified Production Vehicles) within a period of twelve (12) months from the date of the initial test failure of the Prototype Vehicle, then the non-compliance shall be regarded as a material breach of this Contract entitling the Company to terminate under Clause 33.2.1.2 and/or claim damages based upon the loss suffered by it in consequence of the derogation from Specification.

7. **SUPPLY OF PRODUCTION VEHICLES**

- 7.1 Following the issue of a Prototype Vehicle Inspection Report by the Company indicating that the Prototype Vehicle has successfully passed the Prototype Tests, the Contractor agrees to supply Production Vehicles to Vehicle Operators and to the Company in accordance with this Contract.
- 7.2 The Contractor acknowledges that Production Vehicles and Spare Parts may be purchased by either the Company or, with the Company's agreement, by Vehicle Operators for use in London (including the Greater London area). The Contractor will comply with its obligations under this Contract to facilitate the supply of Production Vehicles and Spare Parts to both the Company and Vehicle Operators and agrees that Vehicle Operators will have the benefit of the provisions of this Contract accordingly.
- 7.3 The terms of supply of Production Vehicles supplied to the Company will include the terms set out in Schedule 6, including the Production Tests.
- 7.4 Following a reasonable request to the Company from the Contractor the Parties shall meet in good faith to agree a mutually acceptable forecast and scheduling of requirements for Production Vehicles for supply to the Company and Vehicle Operators. The forecast shall include estimated requirements of the Company and Vehicle Operators and the Contractor will use all reasonable endeavours to meet and comply with such requirements. Provided always that the Company and the Vehicle Operators shall not without the written consent of the Contractor (such consent not to be unreasonably withheld or delayed) require delivery of more than 75 Production Vehicles in any 9 month period. The Parties acknowledge that no additional consideration will be required as a condition of such consent.
- 7.5 Subject to any price increase agreed by the parties pursuant to Clause 35, the Contractor agrees that the price payable by Vehicle Operators for Vehicles (and Spare Parts) supplied to Vehicle Operators by the Contractor will not exceed the maximum price specified in Schedule 4 as varied in accordance with Clause 17.13.
- 7.6 The Contractor agrees that for all Production Vehicles ordered under or pursuant to this Contract it will ensure that the manufacture of the Production Vehicles will have priority over all other manufacturing of the Contractor. This obligation to give priority to the manufacturing of Production Vehicles will apply to all Production Vehicles ordered during the Initial Production Period.

7.7 Production Vehicles shall be deemed to comply with the Specification on delivery if they comply in all material respects with the Specification. For the purpose of this Clause 7.7, a Production Vehicle will be considered to comply in 'all material respects' with the Specification only if it has been issued with an unqualified Production Vehicle Inspection Report.

7.8 Subject to the provisions of Clause 35.1, the Contractor shall cooperate with any consultant or technical adviser nominated by the Company in respect of the Production Vehicles, provided that such nomination is made to the Contractor in advance of any co-operation being required and the consultant or technical adviser does not have any commercial conflict of interest with the Contractor.

7A. 2012 PRODUCTION VEHICLE ORDER

7A.1 The Company has requested and the Contractor shall supply 600 (six hundred) Production Vehicles provided that the Company may, at its discretion, at any time:

7A.1.1 reduce the number of Production Vehicles to be supplied by up to five; or

7A.1.2. increase the number of Production Vehicles to be supplied by up to five,

so that the number of Production Vehicles to be supplied may vary between 595 and 605 Production Vehicles, provided always that at least nine months' notice in writing is given before any such reduction can be made.

7A.2. The price for the Production Vehicles supplied pursuant to this Clause 7A shall be as set out in Clause 7A.4 provided that, in the event of a reduction in the number of Production Vehicles ordered in accordance with Clause 7A.1.1, the Company shall reimburse the Contractor for the Contractor's direct losses (including, for the avoidance of doubt, overhead and loss of profit) arising from such reduction, provided that:

7A.2.1 the Contractor shall use its reasonable endeavours to mitigate its losses;

7A.2.2 the Contractor shall provide the Company with clear evidence of such losses on an open book basis; and

7A.2.3 such compensation shall be not less than £360,000 and not more than £1,500,000.

7A.3 Notwithstanding the provisions of this Clause 7A.1, the Company may at any time upon notice in writing to the Contractor reduce the number of Production Vehicles ordered pursuant to this Clause 7A to 250 or to 450 such notice to be given not later than 6 months before the projected date for delivery of the 250th or 450th Production Vehicle (as the case may be). In the event that the Company so reduces the number of Production Vehicles ordered, the price shall be adjusted in accordance with Clause 7A.7.

7A.4. The price for each Production Vehicle supplied pursuant to this Clause 7A shall be £354,500 and shall not be increased for any reason save in circumstances where the Company reduces the number of Production Vehicles ordered pursuant to Clause 7A.3 or in accordance with Clause 35 and, without prejudice to the generality of the foregoing, there shall be no increase in price for any of the following: inflation, Euro 6 compliance, changes in material rates, labour rates, financing costs, obsolescence, technical change or non-availability of materials or parts, delivery and shipping costs and insurance as required by this Contract.

7A.5. 

7A.6 The price for the Production Vehicles supplied pursuant to this Clause 7A shall be paid as follows:

7A.6.1 in respect of the first 250 Production Vehicles so supplied:

7A.6.1.1 £2,836,000 for eight Vehicles already produced, payment for which has already been made by the Company in accordance with the terms of a letter

dated 4 March 2013, receipt of which is acknowledged by the Contractor;

7A.6.1.2 £21,447,250 as an advance payment payable not later than 30 calendar days following the date of this Contract, subject to an invoice for that sum being received by the Company provided that the Company shall use its reasonable endeavours to pay such sum as soon as reasonably practicable;

7A.6.1.3 £212,700 for each of the last 242 Vehicles of those 250 Vehicles at the point at which such Vehicle has been produced, successfully inspected and is fully ready for delivery; and

7A.6.1.4 £53,175 for each of the last 242 Vehicles of those 250 Vehicles upon delivery to the PV Delivery Site, having met the Production Tests and having been issued with an unqualified Production Vehicle Inspection Report.

7A.6.2 In respect of each Production Vehicle so supplied after the first 250:

7A.6.2.1 £283,600 per Vehicle at the point at which such Vehicle has been produced, successfully inspected and is fully ready for delivery; and

7A.6.2.2 £70,900 per Vehicle upon delivery to the PV Delivery Site, having met the Production Tests and having been issued with an unqualified Production Vehicle Inspection Report.

7A.6.3 In respect of Production Vehicles to be supplied pursuant to this Clause 7A, the Company may from time to time, by notice to the Contractor, simplify the process for determining if the Production Tests have been met in respect of certain Production Vehicles by, for example, providing for inspections and Production Vehicle Inspection Reports to be issued for batches of Vehicles, to be

witnessed by Vehicle Operators and/or to be carried out at the PV Delivery Site.

7A.6.4 The Contractor shall submit its invoices for Production Vehicles supplied pursuant to this Clause 7A to the Company thirty (30) days prior to the relevant date for payment in this Clause 7A.6. On the date of inspection or delivery (as the case may be) the Contractor will confirm to the Company that the Vehicle has been successfully inspected or is ready for delivery (as the case may be) and the Company will transfer the relevant payment for the Vehicle by bank transfer in accordance with Clause 17.6.1. In the case of payments linked to delivery, upon receipt of payment, the Contractor shall immediately deliver the Vehicle to the Company or the relevant Vehicle Operator (as the case may be).

7A.7 In the event that the Company exercises its right under Clause 7A.3 to reduce the order for Vehicles under this Clause 7A to 250 or 450 Production Vehicles, the Contractor shall not be obliged to supply, and the Company shall not be obliged to pay for, any Production Vehicles in excess of 250 or 450, as the case may be, and the Company shall pay to the Contractor compensation within 30 days of the later of the date on which the last Production Vehicle so ordered is produced and the date on which the Contractor supplies the information described in Clause 7A.7.1 below, calculated as follows:

7A.7.1 the value of materials received or ordered by the Contractor in respect of the Production Vehicles which it has been notified are no longer required provided that:

7A.7.1.1 the Contractor shall use all reasonable endeavours to mitigate the amount of compensation payable under this Clause 7A.7 including by exercising any rights to return or cancel any order for such materials or by using such materials in another way;

7A.7.1.2 the value of such materials, after mitigation by the Contractor in accordance with Clause 7A.7.1.1 is

demonstrated by clear evidence to the Company on an open book basis;

7A.7.1.3 in the case of a reduction of the order for Production Vehicles to 250, the amount of compensation shall be the sum of:
a fixed amount of £13,150 per Production Vehicle delivered (being £3,287,500 in aggregate) plus a variable amount to reflect the matters in Clauses 7A.7.1.1 and 7A.7.1.2 which shall not exceed £5,760,000; and

7A.7.1.4 in the case of a reduction of the order for Production Vehicles to 450, the amount of compensation shall be the sum of:
a fixed amount of £4,994 per Production Vehicle being £2,247,300 in aggregate) plus a variable amount to reflect the matters in Clauses 7A.7.1.1 and 7A.7.1.2 which shall not exceed £2,880,000,

and the Contractor shall not be entitled to any other sums in respect of such reduction in the order for Production Vehicles, neither shall the Contractor be relieved of any other obligation under this Contract.

7A.8 The Contractor shall, on the date of this Contract, provide to the Company a parent company guarantee in the form set out in Schedule 16 which shall remain in full force and effect until all Vehicles up to and including the 250th Production Vehicle ordered pursuant to this Clause 7A have been delivered, met the Production Tests and been issued with an unqualified Production Vehicle Inspection Report.

7A.9 The Contractor shall on the date of this Contract deliver a signed copy of the letter contained in Schedule 20. If an event of default occurs (as defined in that letter), the Contractor shall:

7A.9.1 execute a floating charge in favour of the Company in the form contained in the schedule to the letter; and

7A.9.2 procure the delivery of a deed of priority in the form contained in Schedule 21.

7A.10 The Production Vehicles supplied pursuant to this Clause 7A shall be supplied in accordance with the Production Programme and for the purpose of the order pursuant to Clause 7A, the Production Programme shall not be required to comply with paragraph 2 of Schedule 6.

7A.11 At any time and from time to time, the Company shall notify the Contractor of the date on which a specific bus route in London will start operating using Production Vehicles and the number of Production Vehicles required for that route, together with:

7A.11.1 details of the relevant Production Vehicle Delivery Site;

7A.11.2 the earliest date on which those vehicles may be delivered;

7A.11.3 the date by which the last of them must be delivered (“the Target Date”); and

7A.11.4 the proposed date for commencement of service of that route using the Production Vehicles (“the Route Commencement Date”),

provided that:

7A.11.5 the Company shall take into account the Production Programme referred to in Clause 7A.10 and there shall be no requirement for an agreed programme to be set in accordance with the provisions of Clause 7.4; and

7A.11.6 The Contractor shall use its reasonable endeavours to ensure that the number of Production Vehicles stored for more than a minimal period before delivery is no more than twelve. To the extent that Vehicles so stored have not been produced ahead of the Production Programme and their number exceeds twelve, the Contractor may deliver such Vehicles and the Company shall pay for them in accordance with Clause 7A.6.

7A.12

7A.12.1 Where the Contractor becomes, or ought reasonably to be, aware that the Target Date will not or is reasonably likely not to be met in respect of any Production Vehicles supplied pursuant to this Clause 7A including where the cause is a delay in the supply of key materials or components, (and such delay is not caused by a Delay Event, in which case, the provisions of Clause 10 shall apply), the Contractor shall notify the Company's Project Manager of the fact as soon as reasonably practicable. The Contractor shall supply to the Company all such information as the Company may reasonably require to understand the most effective alternative delivery date and the Parties shall work together to develop and implement an alternative delivery plan, taking into account the characteristics of the bus route concerned and the contractual position between the Company and the operator of that route and, where any notification of possible delay given by the Contractor under this Clause 7A.12 is given 12 weeks or more before the relevant Target Date, the Company shall use its reasonable endeavours (and shall not be obliged but may take into account the matters referred to above) to delay the relevant Route Commencement Date.

7A.12.2 Notwithstanding the obligations of the Parties set out above in this Clause 7A.12 concerning the handling of actual or potential delay, where the cause of such actual or potential delay is the insolvency of the supplier of components for Production Vehicles the substitution of which would require the rehomologation and/or testing of the Vehicles to enable them to meet the certification requirements in Clause 8, the Contractor shall propose promptly to the Company an alternative production programme, Target Date and Route Commencement Date for the affected Vehicles for consideration by the Company. The timetable changes proposed by the Contractor shall apply only where agreed by both Parties and documented in accordance with Schedule 12 of this Contract and provided the Contractor shall not be relieved of any obligations under this Contract save the revised agreed timetable for delivery.

7A.13

7A13.1 Notwithstanding the provisions of Clause 7A.12 concerning the provision of alternative delivery dates and to the extent that a Delay Event is not prevailing, where the Target Date is not met in respect of any Production Vehicles supplied pursuant to this Clause 7A and the relevant Route Commencement Date is not subsequently met, the Parties shall meet to discuss alternatives and:

7A.13.1.1 the Company shall notify the Contractor of a revised Route Commencement Date (“the Revised Route Commencement Date”) for such Vehicles, using its reasonable endeavours to set the Revised Route Commencement Date as close to the original Route Commencement Date as practicable, and considering the possibility of partial route conversion to Production Vehicles, taking into account the characteristics of the bus route concerned, customer service requirements and the contractual position between the Company and the operator of that route; and

7A.13.1.2 the Contractor agrees to deliver the Vehicles as if the Revised Route Commencement Date were the Route Commencement Date and to pay to the Company:

7A.13.1.2.1 in respect of each Production Vehicle required for the relevant Route Commencement Date and due to be operated with at least one member of crew in addition to the driver, £1,714 per Production Vehicle per week of delay (or pro rated for part thereof) between the Route Commencement Date (not the Revised Route Commencement Date) and the actual delivery date for that Vehicle, subject

to a maximum amount of £20,568 per Vehicle; and

7A.13.1.2.2 in respect of each Production Vehicle required for the relevant Route Commencement Date and due to be operated by a driver only, £520 per Production Vehicle per week of delay (or pro rated for part thereof) between the Route Commencement Date (not the revised Route Commencement Date) and the actual delivery date for that Vehicle, subject to a maximum amount of £6,240.

7A.13.2 Where a Delay Event occurs, for the duration of that Delay Event, liquidated damages pursuant to this Clause 7A.13 shall not be payable in respect of affected Vehicles.

7A.13.3 All sums payable by the Contractor to the Company pursuant to this Clause 7A.13 shall be paid as liquidated damages and not as a penalty and the Parties agree that such sums are a genuine attempt to pre-estimate the loss which shall be suffered by the Company in the event of any such delay in delivery.

7A.13.4 The payment of liquidated damages shall not relieve the Contractor from any of its obligations or from any other liabilities under this Contract.

7A.13.5 The provisions of this Clause 7A.13 shall not prevent the Company from exercising any of its rights under this Contract and shall be without prejudice to the Company's right to terminate under Clause 33.

7A.13.6 If the failure to deliver a Vehicle ordered pursuant to this Clause 7A continues for more than 6(six) months after the Target Date for that Vehicle, the Company shall at the Company's option be entitled to terminate the contract for that Vehicle and/or this Contract by notice in writing to that effect.

7A.14 The provisions of Clause 17.13 shall not apply in respect of any Production Vehicles supplied pursuant to this Clause 7A save in respect of Spare Parts and Vehicle Maintenance for which it shall continue to apply.

7A.15 The following provisions are intended to grant the Company protection in relation to the advance payment made to the Contractor pursuant to Clauses 7A 6.1.1 and 7A 6.1.2:

7A.15.1 Notwithstanding any other provision of the Contract but subject always to the other provisions of Clauses 7A.15, 7A.16 and 7A.17, title in all materials and components purchased by the Contractor for the purpose of the Contract and in all partially completed Vehicles including vehicles that are effectively complete but have not passed inspection and been fully paid for in accordance with clause 7A.6.1.4 (“**Contract Materials**”) up to the value of the advance payment in Clause 7A 6.1.1 and 7A 6.1.2 (as the value of such advance payment is reduced pursuant to 7A.16) shall pass to the Company at the earlier of the date on which payment for such Contract Materials is made by the Contractor and the date on which such Contract Materials are incorporated into a Vehicle (whether completed or not) and the Contractor shall:

7A.15.1.1 ensure the Contract Materials are clearly identifiable as having been paid for with the advance payment made by the Company on its bill of materials, an up to date copy of which will be provided to the Company at any time and from time to time as required by the Company; and

7A.15.1.2 maintain the Contract Materials in a satisfactory condition and keep them safe from damage or loss and insured for their full price against all risks.

7A.15.2 The Contractor shall only use the Contract Materials to produce the Production Vehicles and for no other purpose. Save for (a) any existing security held by Bank of Ireland in respect of the Contractor (which if the circumstances in Clause 7A. 9.2 apply, shall be subject to the deed of priority referred to in that clause) and (b) any security provided by the Contractor pursuant to this

Contract, the Contractor shall not sell, offer to sell, assign, underlet, pledge, mortgage, charge, encumber or part with possession of or otherwise deal with the Contract Materials or any interest in them nor create or allow to be created any lien over the Contract Materials. The Company shall be entitled (but will not be bound) to pay to any third party such sum as is necessary to procure the release of the Contract Materials from any such charge, encumbrance or lien and will be entitled to recover this sum from the Contractor forthwith and, in any event, the Contractor shall pay to the Company the costs of recovering and/or repossessing the Contract Materials.

7A.15.3 The Contractor's right to possession of the Contract Materials will terminate immediately if the Contractor:

7A.15.4.1 is subject to an Insolvency Event; or

7A.15.4.2 is in breach of Clause 7A.15.1.2.

7A.15.5 Subject to Clause 7A.15.6, the Contractor grants the Company, its agents and employees an irrevocable licence at any time upon reasonable notice to enter any premises where the Contract Materials are or may be stored in order to inspect them, or, where the Contractor's right to possession has terminated, to recover them.

7A.15.6 The rights and obligations in Clause 7A.15 shall cease to apply after the delivery of the 250th Vehicle to be supplied under this Clause 7A.

7A.16 For the purposes of Clause 7A.15, the value of the advance payment referred to in Clause 7A.6.1.1 and Clause 7A 6.1.2 shall reduce by £88,625 on the delivery of each Vehicle to the Company pursuant to the Contract.

7A.17 The Parties shall, in making any decisions they may respectively be entitled to be obliged to make under this Clause 7A, act reasonably.

8. VEHICLE CERTIFICATION

- 8.1 Notwithstanding any approval that the Company Project Manager may have given in accordance with the Contract, the Contractor shall ensure that prior to delivery the Prototype Vehicle and each Production Vehicle has a certificate or certificates from the appropriate agency stating that it has been registered and that it is roadworthy and fit for use as a public service vehicle. The Contractor shall provide copies of all such certificates to the Company Project Manager or the Vehicle Operator, as applicable, prior to delivery of each Vehicle.
- 8.2 If the appropriate agency declines to issue a certificate in respect of a Vehicle due to the Vehicle failing to comply with the agency's requirements then the Contractor shall (at its own expense and as soon as reasonably practicable) make all repairs and rectifications as may be necessary to put such Vehicle in a condition acceptable to the appropriate agency so that a certificate can be issued.
- 8.3 For the avoidance of doubt the Contractor shall not be entitled to an extension of time for delivery if the appropriate agency declines to issue a certificate due to any Vehicle failing to meet the agency's requirements.
- 8.4 Upon the Contractor's reasonable request, the Company agrees to provide reasonable assistance to the Contractor in connection with the Contractor's efforts to obtain certification from the appropriate agency provided the Contractor gives the Company not less than 10 Business Days' notice in writing.

9. SUPPLY OF SPARE PARTS

- 9.1 Throughout the operational life of the Production Vehicles (being 14 years from the date the Production Vehicles pass inspection) and for a period of 15 years thereafter, the Contractor agrees with the Company to ensure that in accordance with this Clause 9 it is able to supply and will supply all Spare Parts required by the Company and Vehicle Operators to operate and maintain the Vehicles. Without prejudice to the generality of the foregoing, the Contractor will hold in its stock and immediately available for supply under the Vehicle Warranty sufficient Spare Parts (including critical and specialist Spare Parts as well as generic parts and consumables) that may be required to keep supplied Vehicles operational during the relevant Vehicle Warranty period for that Vehicle.

- 9.2 From time to time the Company may place a written purchase order with the Contractor for Spare Parts. The Contractor will confirm any orders for Spare Parts in accordance with the provisions of Schedule 8 and shall supply the Spare Parts accordingly. The Spare Parts shall be delivered at the times agreed and in accordance with the procedures and terms set out in Schedules 8 and 9. The Contractor will provide with each delivery of Spare Parts a full and accurate description of the Spare Parts supplied including certificates of origin and commodity codes. For the avoidance of doubt, if there is any conflict between the terms of this Contract and the terms of Schedules 8 or 9, the terms of this Contract shall prevail.
- 9.3 The price and payment terms for all Spare Parts supplied to the Company by the Contractor will be as set out in Clause 17 and Schedule 4. The Contractor agrees with the Company that it will supply Spare Parts to Vehicle Operators on terms, including as to price (but only in respect of any Unique Spare Parts) and payment, no less favourable than the terms set out in this Clause 9.
- 9.4 If the Contractor fails to provide Spare Parts ordered from the Contractor and these are available from any of its sub-contractors, the Contractor agrees that the Company and the Vehicle Operators may obtain such Spare Parts from such sub-contractors and the Contractor shall pay the Company and/or the Vehicle Operators any additional costs, charges or expenses incurred.
- 9.5 If the Contractor fails to deliver any Spare Parts within twenty (20) Business Days of receipt of a purchase order by the Company or a Vehicle Operator, the Company and/or the Vehicle Operator shall, if the Spare Parts are ordered for Vehicles which must have parts immediately replaced to be operated safely, be entitled to procure the hire of a replacement bus or buses of equivalent size and capacity as such Vehicles until such Spare Parts are delivered and recover all reasonable costs and expenses incurred by the Company and/or the Vehicle Operator in securing such replacement bus(es) from the Contractor.

10. **EXTENSIONS TO THE DELIVERY DATE**

- 10.1 If in the reasonable opinion of the Contractor there has been or is likely to be a delay in the delivery dates for the Vehicles or Spare Parts to the Company caused by reason of any of the following events (each a “**Delay Event**”):

10.1.1 any demonstrable act, default or neglect of the Company under this Contract; or

10.1.2 any variation of the Contract under Clause 35; or

10.1.3 the occurrence of any Force Majeure Event affecting the Contractor;

then the Contractor shall give notice to the Company Project Manager of the Delay Event and any claim for an extension of time for delivery of the Vehicles or Spare Parts within ten (10) Business Days after the cause of any delay has arisen. Any extended period or periods for delivery shall be subject to regular review provided that no such review shall result in a decrease in any extension of time already granted unless the circumstances surrounding the delay have changed such that a decrease is reasonable and the Parties acting reasonably, have agreed to a decrease in the extension of time previously granted.

10.2 Within five (5) Business Days of receipt of the notice from the Contractor required under Clause 10.1, the Company shall notify the Contractor whether it agrees that the event causing the delay was a Delay Event covered by Clause 10.1 and the following provisions shall apply:

10.2.1 If the Company (acting reasonably) does not agree that the event was a Delay Event covered by Clause 10.1, then the Contractor will not be provided any extension of time and the Contractor shall comply with the existing delivery dates.

10.2.2 If the Company (acting reasonably) agrees that the event was a Delay Event covered by Clause 10.1, then the Company shall notify the Contractor whether it agrees with the amount of the time extension requested by the Contractor. If the Company (acting reasonably) does not agree to the amount of time requested by the Contractor, the Company shall notify the Contractor of the amount of the time extension which it will grant and the Contractor shall only be entitled to that extension of time.

10.2.3 If the Contractor does not agree (acting reasonably) with any determination made by the Company under this Clause 10.2, then the Contractor shall have the right to submit the Company's determination to dispute resolution under Clause 47 of this Contract.

- 10.3 It shall be a condition precedent to the Contractor's entitlement to an extension of time under this Clause 10 that the Contractor has given written notice to the Company Project Manager of the actual or foreseen delay and the Contractor has used all reasonable endeavours to overcome, avoid and/or minimise the effects of any occurrence causing delay.
- 10.4 The Contractor shall be entitled to the reasonable costs and expenses reasonably incurred by the Contractor as a result of an extension of time being granted by the Company by reason of the circumstances set out in Clauses 10.1.1 or 10.1.2.
- 10.5 The Contractor's entitlement to an extension of time under Clause 10.1 or reimbursement of costs and expenses under Clause 10.4 shall be reduced proportionately to the extent that any default of the Contractor or its sub-contractors, including without limitation any neglect on the part of the Contractor or its sub-contractors, may have contributed to the delay.
- 10.6 The Contractor shall on request of the Company provide weekly progress reports of the details affecting the delivery schedule including without limitation providing up to date information regarding delays.
- 10.7 Any extension of time granted under this Clause 10 shall apply equally to any obligations of the Company.

11. **LIQUIDATED DAMAGES FOR LATE DELIVERY**

- 11.1 Save in respect of Production Vehicles ordered pursuant to Clause 7A, the Contractor agrees to pay to the Company the liquidated damages set out in Clause 11.2 for each Vehicle that the Contractor fails to deliver on or before the agreed delivery date for that Vehicle whether delivery is to the Company or any third party, provided however, that the Company shall not be entitled to recover liquidated damages to the extent the Contractor is entitled to an extension of time under this Contract.
- 11.2 Except as provided in Clause 11.1, for each Vehicle that is delivered to the Company after the agreed delivery date, the Contractor agrees to pay the Company liquidated damages as follows:
- 11.2.1 in respect of each Production Vehicle due to be operated with at least one member of crew in addition to the driver, £1,714 per week of delay (or pro rated for part thereof) subject to a maximum of £20,568

per Vehicle; and

11.2.2 in respect of each Production Vehicle due to be operated by a driver only, £250 per week of delay (or pro rated for part thereof) subject to a maximum of £6,240 per Vehicle.

11.3 All sums payable by the Contractor to the Company pursuant to this Clause 11 shall be paid as liquidated damages and not as a penalty and the Parties acknowledge that such sums are a genuine attempt to pre-estimate the loss which shall be suffered by the Company in the event of any such delay in delivery of a Vehicle under this Contract.

11.4 The payment of liquidated damages shall not relieve the Contractor from any of its obligations or from any other liabilities under this Contract.

11.5 The provision of this Clause 11 shall not prevent the Company from exercising any of its rights under this Contract and shall be without prejudice to the Company's right to terminate under Clause 33.

11.6 If the failure to deliver a Vehicle on the agreed delivery date for that Vehicle continues for more than 6 (six) months, the Company shall at the Company's option be entitled to:

11.6.1 terminate the contract for that Vehicle and/or this Contract by notice in writing to that effect during the Initial Production Period;

11.6.2 terminate the contract for that Vehicle by notice in writing to that effect after the expiry of the Initial Production Period.

12. **OPERATING INFORMATION AND TRAINING PROGRAMME**

12.1 The Contractor shall promptly render to the Company and Vehicle Operators all reasonable Operating Information that they may require in connection with the operation or day-to-day maintenance of the Production Vehicles and/or Spare Parts together with one set of all such Operating Information on disk and any and all updates to such Operating Information.

12.2 The Contractor shall provide an educational and training programme (the "**Training Programme**") for personnel of the Company (and/or for its Vehicle Operators) that demonstrates the proper servicing and maintenance of the Production Vehicles, as more specifically described in, and in accordance with the terms of, the Specification.

13. QUALITY ASSURANCE

- 13.1 The Contractor shall maintain an effective and economical programme for quality, planned and developed in conjunction with the other functions of the Contractor necessary to satisfy the requirements of this Contract. The programme shall:
- 13.1.1 demonstrate both recognition of the quality requirements of this Contract and an organised approach to satisfy these requirements;
 - 13.1.2 provide that quality requirements are determined and satisfied throughout all phases of performance of this Contract including as applicable design, development, purchasing, fabrication, processing, assembly, inspection, testing, packaging, delivery, storage and systems checks;
 - 13.1.3 provide for the early and prompt detection of actual or potential deficiencies, trends or conditions which could result in unsatisfactory quality and for timely and effective corrective action; and
 - 13.1.4 comply with the quality system requirements set out in the Specification.
- 13.2 Objective evidence that the quality control system is effective shall on request be made available to the Company Project Manager.

14. LIMITED WARRANTIES

- 14.1 The Contractor warrants that Vehicles supplied to the Company and Vehicle Operators will comply fully with the Vehicle Warranty and that the Spare Parts will comply fully with the Spare Parts Warranty.
- 14.2 In addition to the Limited Warranties referred to in Clause 14.1, the Contractor warrants that each Vehicle and Spare Part supplied under or in relation to this Contract:
- 14.2.1 will be designed, manufactured and supplied with the highest care, skill and diligence to be expected of appropriately qualified and experienced persons (of a professional level if appropriate) with appropriate skill and experience in supplying vehicles and of a similar scope, type, nature and complexity to that required under this Contract;

- 14.2.2 will be fully operational and free from defects in design;
- 14.2.3 has been designed in conformance with the Specification and the other provisions of this Contract;
- 14.2.4 meets as of the date of delivery all of the requirements of the Specification and other provisions of this Contract;
- 14.2.5 has a rate of deterioration no more than is reasonably to be expected of well designed and engineered materials and goods and has a primary structural life span of 12 years and a target operational life span of not less than 14 years; and
- 14.2.6 is of satisfactory quality and fit for on-road public transit operations in a city environment.

14.3 Warranty Exclusions

The Vehicle Warranty and the Spare Parts Warranty and the warranties in Clause 14.2 shall not apply to any defect or failure (save for any defect or failure caused wholly or partly by the Contractor or its duly authorised service representatives) to the extent it occurs by reason of any of the following:

- 14.3.1 external causes such as road accidents, scratches, and similar events (howsoever caused);
- 14.3.2 the neglect or failure to ensure that the Vehicles are inspected, serviced or maintained in accordance with Contractor's prior written recommendations (including recommended daily checks, use of spare parts and use of proper coolants) received by the Company;
- 14.3.3 alterations, repairs, or replacements carried out other than by the Contractor or its duly authorised service representatives;
- 14.3.4 vandalism;
- 14.3.5 overloading, operation other than in accordance with the Contractor's prior written recommendations received by the Company, or use of spare parts not approved by the Company; or
- 14.3.6 any abuse or misuse by the Company (or its employees, agents, or service providers (other than the Contractor)).

14.4 The Vehicle Warranty and the Spare Parts Warranty shall be made by the Contractor to the Company in accordance with the terms of this Clause 14 and are transferable without further notice with the applicable Vehicle.

14.5 Repair Procedure for Warranty Claims

14.5.1 The Contractor shall be financially responsible for all repairs (including any necessary replacements as the Contractor may reasonably determine) covered by the Vehicle Warranty, the Spare Parts Warranty and claims under Clause 14.2 and shall also be responsible for performing all repairs (including any necessary replacements) in a timely fashion in accordance with this Clause 14.5. The Contractor may enter into an agreement with a local agent for the actual performance of warranty repairs, and if the Contractor enters into such an agreement, the references to Contractor in this Clause 14.5 shall be deemed to be a reference to that local agent. Notwithstanding any such agreement, the Contractor shall retain full legal and financial responsibility for warranty-covered repairs.

14.5.2 If the Company (or the Contractor when performing services) detects a defect with a Vehicle within the applicable warranty period, the Company (or the Contractor if the Contractor is first to detect the defect) shall promptly notify the Contractor (or the Company if the Contractor is the first to detect the defect) of the defect. Within five (5) Business Days after such notification, the Contractor shall either:

14.5.2.1 agree that the defect is covered by the relevant Vehicle Warranty or Spare Parts Warranty or other warranty;

14.5.2.2 disagree that it is covered by the relevant Vehicle Warranty or Spare Parts Warranty or other warranty; or

14.5.2.3 reserve judgment as to whether it is covered by the relevant Vehicle Warranty or Spare Parts Warranty or other warranty and arrange for the Vehicle to be inspected by a representative of the Contractor within the period of five (5) Business Days from the date of notification, in which case it shall provide its response as to warranty coverage within two (2) Business Days after such inspection has been completed,

1.1.1.1 provided always that the Contractor shall act reasonably in all circumstances.

- 14.5.3 If the Contractor agrees under Clause 14.5.2.1 that the noticed defect is covered by the relevant Vehicle Warranty, Spare Parts Warranty or other warranty then the Contractor shall begin warranty repair work within five (5) Business Days after identifying or receiving notification of the defect. If the Contractor agrees that the noticed defect is covered by the relevant Vehicle Warranty, Spare Parts Warranty or other warranty after an inspection under Clause 14.5.2.3, then the Contractor shall begin warranty repair work within two (2) Business Days after completion of such inspection.
- 14.5.4 The Company shall use all reasonable efforts to make the Vehicle available to facilitate the completion of repairs within the Contractor's repair schedule and such schedule is to be agreed in advance by the Company. The Contractor shall provide at its own expense, all necessary parts, or subassemblies required for the repair. The Contractor shall determine, in its discretion, whether a Vehicle part or subsystem should be repaired or replaced.
- 14.5.5 Any Vehicle covered by any or all of the Vehicle Warranty, Spare Parts Warranty or other warranty which is not available for use for a period greater than ten (10) Business Days awaiting warranty repair by the Contractor under this Clause 14.5 shall have the applicable warranty periods for such Vehicle extended by one (1) calendar day for each calendar day the Vehicle is out of use awaiting warranty repair.
- 14.5.6 If the Contractor (acting reasonably) disagrees that the defect is covered by the relevant Vehicle Warranty, Spare Parts Warranty or other warranty or the Contractor fails to perform any repairs in accordance with Clause 14.5.1 and the Company believes that repairs must proceed (including any necessary replacements as the Company may reasonably determine), the Company may immediately commence repairs, either directly or through its service provider or other authorized representative. If the Company undertakes repairs, it shall correct or repair the defect and any related defects using parts specified or approved by the Contractor that are specifically available for the repair. The Company may

require that the Contractor make Spare Parts available for purchase by the Company. The Company will be entitled to be reimbursed for all costs incurred by the Company under this Clause where the Company has undertaken repairs that the Contractor has failed to perform in accordance with Clause 14.5.1.

- 14.5.7 If the repairs or replacements covered by the relevant Vehicle Warranty, Spare Parts Warranty or other warranty are of such a character as may reasonably affect the operation of other Vehicles in the Company's or a Vehicle Operator's Vehicle fleet or any part thereof, then the Company may within ten (10) Business Days after such repair or replacement give notice to the Contractor requiring that further inspection tests are performed by the Contractor to determine if such defect exists in the other Vehicles in the Company's and/or Vehicle Operator's fleet. The Contractor shall complete the fleet inspection within a reasonable amount of time. If the same defect is discovered to exist in any other Vehicle in the Company's or a Vehicle Operator's fleet, then the provisions of this Clause 14 shall begin to apply to such Vehicle as of the date of discovery of the same defect in such Vehicle.
- 14.6 If any component of a Vehicle is repaired, rebuilt or replaced under the relevant Vehicle Warranty, Spare Parts Warranty or other warranty, such component shall be warranted for the unexpired warranty period of the original component's warranty.
- 14.7 If any significant materials or equipment supplied hereunder are covered by warranties of the manufacturer or supplier other than the Contractor ("**Third Party Warranties**") and such Third Party Warranties have terms that are longer or more favourable than the warranties provided by the Contractor in this Contract for such significant materials or equipment, then the Contractor will extend, at no additional cost to the Company and any applicable Vehicle Operator, the duration and/or scope of the applicable Third Party Warranties and notify the Company thereof by written notice.
- 14.8 Any disputes regarding the warranty provisions of this Clause 14 (including whether specific repairs are covered and the reimbursable cost of repairs) shall be subject to the dispute resolution procedures set out in Clause 47 of this Contract.

- 14.9 Each warranty in this Clause 14 shall be construed as a separate warranty and shall not be limited or restricted by reference to, or reference from, the terms of any other warranty.
- 14.10 The Contractor agrees that the warranties provided under and the provisions of this Clause 14 shall apply equally to the Vehicle Operators at no additional cost.

15. PROPERTY TO PASS AND TRANSFER OF RISK

- 15.1 Subject to the provisions of Clause 7A.15, title and property in each of the Vehicles supplied to the Company by the Contractor shall vest in the Company when payment is made in full for each Vehicle, provided that if the Contractor fails to comply with the provisions of Clause 17.1.1, title in each Vehicle shall pass to the Company on delivery if earlier.
- 15.2 Title and property in the Spare Parts and the static mock up supplied to the Company by the Contractor shall vest in the Company when payment is made in full to the Contractor in respect of the purchase of such items.
- 15.3 The risk of any loss or damage to or caused by the Vehicles and/or the Spare Parts or any part thereof shall not pass to the Company until delivery in accordance with this Contract.
- 15.4 For the avoidance of doubt, title and risk in any Vehicles and/or Spare Parts supplied to Vehicle Operators pursuant to this Contract shall pass in accordance with the terms of contract made in the ordinary course of business between the Contractor and such Vehicle Operators.

16. MAINTENANCE AND SERVICING

- 16.1 In addition to the Contractor's obligations to provide support for the Vehicles in connection with the warranties set out in Clause 14, the Contractor shall provide corrective service and preventive maintenance support for the Vehicles in accordance with the Specification and Schedule 14.
- 16.2 The Contractor warrants that the services provided to the Company under this Contract, including design, development and technical services, and services performed in connection with this Clause 16, will be performed:
- 16.2.1 with the highest degree of skill, care and diligence normally exercised by recognised professional firms or by highly skilled and experienced

contractors providing services of a similar scope, type and complexity to the labour under this Contract and with sufficient resources;

16.2.2 in conformance in all respects with the Specification and so that they fulfil the purpose indicated by; and

16.2.3 in a safe manner and free from any unreasonable or avoidable risk to any person's health and well-being and in an economic and efficient manner.

16.3 In the event the Contractor breaches the services warranty in Clause 16.2.1, the Contractor shall promptly correct such services, provided that written notice of such defective services shall have been given by the Company to the Contractor within thirty (30) Business Days of the Company's discovery of such defect.

16.4 The Contractor agrees that the price payable by Vehicle Operators for Vehicle Maintenance and Support supplied to Vehicle Operators by the Contractor in accordance with Schedule 14 will not exceed the maximum price specified in Schedule 4 as amended in accordance with Clause 17.13. Where the scope of the Vehicle Maintenance and Support required by any Operator is less than the scope described in Schedule 14, the Contractor agrees that the price payable for such services will be reduced on a basis that is consistent with the pricing in Schedule 4 and, where requested to do so, shall demonstrate such consistency to the Company's reasonable satisfaction.

17. **PAYMENT TERMS AND VALUE ADDED TAX**

17.1 Subject to any adjustment under Clause 17.13, the Contractor shall:

17.1.1 submit its invoices for Vehicles ordered by the Company to the Company thirty (30) days prior to the delivery date for each Vehicle (as notified to the Company in accordance with Schedule 6) and in accordance with the prices set out in Schedule 4 as amended in accordance with Clause 17.13. On the delivery date, the Contractor will confirm to the Company that the Vehicle is ready for delivery and the Company will transfer payment for the Vehicle by bank transfer in accordance with Clause 17.6.1. Upon receipt of the payment for the Vehicle the Contractor shall immediately deliver the Vehicle to the Company;

17.1.2 be entitled to submit its invoices to the Company for the Project Milestones, Spare Parts and Vehicle Maintenance and Support in accordance with the prices set out in and the terms of Schedule 4.

For the avoidance of doubt, the terms for invoicing and making payment for Vehicles and/or Spare Parts supplied to Vehicle Operators shall be determined in accordance with the terms of contract made in the ordinary course of business between the Contractor and such Vehicle Operators.

17.2 All invoices submitted by the Contractor shall be clear, concise, accurate, adequately descriptive and in the format required by the Company and in particular shall quote the Contract Number as listed on the front cover of this Contract, the Company SAP number as provided by the Company from time to time, and provide reasonable detail for the payment being invoiced (i.e. reference to an applicable payment milestone, the reference number of the shipping inventory list sent with a Spare Part, etc.).

17.3 In the event of any variation in accordance with Clause 35 to the price payable which involves the payment of additional costs to the Contractor the Contractor shall identify each as a separate item on the invoice.

17.4 All invoices shall be submitted, along with all relevant supporting documentation, to the Company at the following address:

London Bus Services Limited
Accounts Payable
14 Pier Walk
London
SE10 0ES.

17.5 Any loss and/or additional expenses incurred by the Contractor in correcting and resubmitting any invoice shall be at the Contractor's expense.

17.6 If the Company considers that the amounts claimed by the Contractor in any invoice have:

17.6.1 been correctly calculated and that such invoice is otherwise correct, the invoice shall be approved and payment shall be made by bank transfer (Bank Automated Clearance System (BACS)) or such other method as the Company may choose from time to time within 30 days of receipt of such invoice or any shorter time period explicitly provided in this Contract;

- 17.6.2 not been calculated correctly and/or if the invoice contains any other error or inadequacy, the Company shall notify the Contractor and the Parties shall work together to resolve the error or inadequacy. Upon resolution, the Contractor shall submit a revised invoice to the Company and the provisions of Clause 17.6.1 shall apply to such invoice.
- 17.7 Unless otherwise expressly provided, except for VAT, the prices specified in this Contract are inclusive of all costs and expenses (including any and all import taxes and similar taxes) and all ancillary and other works and expenditure, whether separately or specifically mentioned or described in the Contract or not, which are necessary to supply the Vehicles and the Spare Parts.
- 17.8 The sums payable by the Company under this Contract are exclusive of VAT and the Company is responsible for paying any VAT applicable to valid invoices submitted to the Company in accordance with this Contract. VAT, where applicable, must be shown as a separate charge on invoices submitted by the Contractor.
- 17.9 For the avoidance of doubt, where the Contractor sub-contracts any part of this Contract to a third party, the Contractor is responsible for the payments to that third party.
- 17.10 No payment by the Company (including any final payment) shall:
- 17.10.1 indicate or be taken to indicate the Company's acceptance or approval of all or any Vehicles and/or Spare Parts or any part of them supplied or any act or omission of the Contractor or otherwise prejudice any rights, powers or remedies which the Company may have against the Contractor, or absolve the Contractor from any obligation or liability imposed on the Contractor under or by virtue of this Contract; or
- 17.10.2 prevent the Company from recovering any amount overpaid or wrongfully paid including payments made to the Contractor by mistake of law or fact. The Company shall be entitled to withhold such amount from any sums due or which may become due to the Contractor or the Company may recover such amount as a debt.
- 17.11 All amounts payable shall be paid in pounds sterling.

17.12 If any sum payable by either Party under this Contract (which is not disputed) is not paid when due then, without prejudice to the other Party's rights under this Contract, that sum will bear interest from the due date until payment is made in full both before and after any judgment, at 0.5 per cent per annum over HSBC Bank plc base rate from time to time.

17.13 Price Review Board

17.13.1 The Parties agree that the pricing set out in Schedule 4 for the Production Vehicles, the Spare Parts and the Vehicle Maintenance and Support shall be fixed for Vehicles scheduled to be delivered up to and including 31 December 2012.

17.13.2 The Parties shall form a Price Review Board comprising representatives of the Company and the Contractor. The Price Review Board shall meet in May 2012 to review the fixed prices set out in Clause 17.13.1 in accordance with Clause 17.13.3. Either Party may convene such meeting by no less than five (5) Business Days' notice to the other.

17.13.3 The Price Review Board will review a predetermined basket of key cost drivers as set out in Schedule 4 and appropriate variations to the prices shall be made based on such review by no later than 30 June 2012. The review will use a combination of "open book" and market trends. The variations to the prices shall be documented in accordance with Clause 35 and shall apply from 01 January 2013, unless otherwise agreed.

17.13.4 If a Party does not agree with any variation to the prices, it shall be entitled to refer the matter to dispute resolution in accordance with Clause 47 and the fixed prices set out in this Contract shall continue to apply pending the outcome of such dispute.

17.13.5 Following the initial review under Clause 17.13.2, the Price Review Board shall, where the Parties so agree, meet annually to review the prices and the provisions of Clauses 17.13.2 to 17.13.4 shall apply in respect of any such review.

17.14 In the event of any conflict between the provisions of this Clause 17 and the provisions of Clause 7A, the provisions of Clause 7A shall take precedence.

18. **SET OFF**

All sums or other amounts owed to the Company pursuant to the terms of this Contract may be deducted by the Company from monies due or which may become due to the Contractor under this Contract or the Company may recover such amounts which are due to it as a debt.

19. **FREE ISSUE GOODS OR MATERIALS**

Where the Company issues materials (including materials, tooling, patterns and the like) free of charge to the Contractor for the purposes of the Contract such materials shall be and remain the property of the Company. The Contractor shall maintain all such materials in good order and condition subject, in the case of tooling, patterns and the like, to fair wear and tear. The Contractor shall use such materials solely in connection with the Contract. Any surplus materials shall be disposed of at the Company's discretion. Waste of such materials arising from bad workmanship or negligence of the Contractor shall be made good at the Contractor's expense. Without prejudice to any other of the rights of the Company, the Contractor shall deliver up such materials issued free of charge whether further processed by the Contractor or not to the Company on demand.

20. **CONTRACT MANAGEMENT**

20.1 The Company authorises (i) the Company Project Manager to act as the Company's representative in respect of the day to day management of this Contract; (ii) the Company Technical Manager to act as the Company's representative in respect of all technical matters relating to this Contract; and (iii) the Company Manager to act as the Company's representative in respect of all commercial matters relating to this Contract.

20.2 The Company Project Manager, the Company Technical Manager and the Company Manager may delegate any of their functions and may at any time revoke any such delegation. Any such delegation shall be in writing and shall state which function is delegated and the person or persons to whom the same is delegated.

20.3 Except to the extent provided in any written agreement signed by the Company, no act, omission, comment or approval of either the Company, the Company Project Manager, the Company Technical Manager or the Company Manager under or in connection with this Contract shall in any way

operate to relieve the Contractor of its responsibility for performing this Contract.

- 20.4 The Contractor authorises the Contractor's Representative to act as its representative for all purposes of this Contract but provided always that the Contractor's Representative shall not have the authority to alter or amend the nature of the Contractor's obligations under this Contract save in accordance with Clause 35. The Contractor's Representative cannot be changed without the prior written approval of the Company, such approval not to be unreasonably withheld.
- 20.5 The Company may by notice in writing to the Contractor object to any of the Contractor's personnel who have misconducted themselves or been incompetent or negligent and the Contractor shall immediately remove such person from performing this Contract and provide a suitable replacement (to be approved by the Company Project Manager, if they are, in the Company Project Manager's opinion, key personnel).
- 20.6 The Contractor shall at all times co-operate, meet and share Performance Data and act in good faith in a collaborative manner with the Company and the Vehicle Operator provided however that where the Performance Data is to be made public the Company shall, where practicable, first afford the Contractor the opportunity to review and comment upon the presentation of the same and provided further, that, in the event the Company requests that the Contractor share information other than Performance Data and the Contractor reasonably considers such other information to be propriety and/or confidential, then the Contractor shall not be obligated to disclose such other information under this Contract.
- 20.7 The Contractor's Representative shall meet with the Company Project Manager monthly (or at such other frequency that the Company may notify to the Contractor) to consider the implementation of this Contract including consideration of any information to be provided in accordance with Clause 20.8.
- 20.8 The Contractor shall:
- 20.8.1 provide the Company with Performance Data (and the Contractor acknowledges and agrees that the Performance Data may be made public directly by the Company or indirectly by the UK Government (including the Department for Business, Innovation and Skills));

- 20.8.2 provide the Company with such other reports and information it may reasonably request (including but not limited to reports that the Company may use publicly);
- 20.8.3 provide the Company with reports on the timescales of delivery of any key materials or components;
- 20.8.4 attend progress meetings with the Company at not more than four weekly intervals;
- 20.8.5 attend all other meetings and conferences (including but not limited to all steering group meetings with the Company and/or TfL) and deliver presentations regarding the Production Vehicles upon the Company's request;

as the Company may from time to time reasonably require provided the Contractor shall not be obliged to provide any information that the Contractor reasonably considers to be confidential or proprietary to the business of the Contractor (the Contractor acknowledges that the Performance Data is not confidential or proprietary to the business of the Contractor for the purposes of this Contract). At the date of this amended and restated Contract the information required under Clause 20.8 is set out in Schedule 19 and may be varied from time to time in accordance with this Clause 20.8.

21. SUB-CONTRACTING AND CHANGE OF OWNERSHIP

- 21.1 The Contractor shall not sub-contract all or any part of this Contract without the prior written consent of the Company which may be refused or granted subject to such conditions as the Company sees fit.
- 21.2 Where the Contractor sub-contracts all or any part of this Contract to any person, the Contractor shall:
 - 21.2.1 ensure that such person is obliged to comply with all of the obligations and duties of the Contractor under this Contract insofar as they relate to this Contract or that part of it (as the case may be) which that sub-contractor is required to provide;
 - 21.2.2 be responsible for payments to that person; and
 - 21.2.3 remain solely responsible and liable to the Company for any breach of this Contract or any performance, non-performance, part-

performance or delay in performance of this Contract by any sub-contractor to the same extent as if such breach, performance, non-performance, part-performance or delay in performance had been carried out by the Contractor.

21.3 The Contractor shall make the Company aware of any actual or proposed Change of Control as soon as practicable before (subject to confidentiality requirements) or immediately after any Change of Control occurs. Following a Change of Control of the Contractor, the Company may terminate this Contract by notice in writing to that effect, any such notice to be served within six (6) months of notification of the Change of Control or the event of Change of Control whichever is the later, provided that the Company may not terminate this Contract in relation to a Change of Control which the Company has (in its entire discretion) pre-approved in writing. **“Change of Control”** means (i) any merger, consolidation or other business combination transaction of the Contractor with or into another corporation, entity or person, other than a transaction in which the holders of at least a majority of the shares of voting capital stock of the Contractor outstanding immediately prior to such transaction continue to hold (either by such shares remaining outstanding or by their being converted into shares of voting capital stock of the surviving entity) a majority of the total voting power represented by the shares of voting capital stock of the Contractor (or the surviving entity) outstanding immediately after such transaction, or (ii) the acquisition by any person, or persons acting as a group, of ownership of shares representing a majority of the voting power of the then outstanding shares of capital stock of the Contractor.

21.4 The Company may sub-contract all or any part of this Contract without the prior written consent of the Contractor to a third party provided such third party has an equivalent or better credit rating to the Company.

22. **CONFLICT OF INTEREST**

22.1 The Contractor warrants that it does not and will not have at the Effective Date any interest in any matter where there is or is reasonably likely to be a conflict of interest with the subject matter of this Contract or any member of the TfL Group or the GLA Body, as the case may be, save to the extent fully disclosed to and approved by the Company.

22.2 The Contractor shall check for any conflict of interest at regular intervals throughout this Contract and in any event not less than once in every six months and shall notify the Company in writing immediately upon becoming aware of any actual or potential conflict of interest with the subject matter of this Contract and shall work with the Company to do whatever is necessary (including the separation of staff working on, and data relating to, the subject matter of this Contract from the matter in question) to manage such conflict to the Company's reasonable satisfaction, provided that, where the Company is not so satisfied, the Company may terminate this Contract in accordance with Clause 33.

23. **RIGHTS OF ACCESS**

The Contractor shall (and shall procure that its sub-contractors shall) afford the Company Project Manager and representatives of Vehicle Operators access at all reasonable times to any premises, equipment, plant, machinery or systems used in the performance of this Contract for the purpose of any inspection, audit or check of the Production Vehicles and/or Spare Parts. No charges shall be payable by either Party for such inspections.

24. **ADDITIONAL WARRANTIES AND UNDERTAKINGS**

24.1 Without prejudice to Clause 14, the Contractor warrants to the Company that the Prototype Vehicle and the Production Vehicles and/or Spare Parts shall comply with all applicable requirements of Law, which are applicable to the Prototype Vehicle and Production Vehicles and/or Spare Parts on the date of delivery of the relevant Vehicle and/or Spare Part under this Contract.

24.2 Without prejudice to Clause 14 or any warranties (or warranty limitations) expressed elsewhere in the Contract or implied by Law, the Contractor warrants, represents and undertakes to the Company that:

24.2.1 the Contractor:

24.2.1.1 has full capacity and authority and all necessary licences, permits, permissions, powers and consents (including, where its procedures so require, the consent of its holding company as required, the consent of its holding company as defined in section 1159 of the Companies Act 2006) to enter into and to perform this Contract; and

24.2.1.2 is aware of the purposes for which the Prototype Vehicle, the Production Vehicles and/or Spare Parts are required (as provided in the Specification) and acknowledges that the Company is reliant upon the Contractor's expertise and knowledge in the provision of the Prototype Vehicles, the Production Vehicles and/or the Spare Parts; and

24.2.2 this Contract is executed by a duly authorised representative of the Contractor; and

24.2.3 all documents, drawings, work prepared or developed by the Contractor or supplied to the Company under this Contract shall not infringe any Intellectual Property Rights or any other legal or equitable right of any person.

24.3 Each warranty in this Clause 24 shall be construed as a separate warranty and shall not be limited or restricted by reference to, or reference from, the terms of any other warranty.

25. **COMPLIANCE WITH LAWS AND OTHER RULES**

25.1 Whilst present on any TfL Group premises or premises of any Vehicle Operator the Contractor shall ensure that its personnel observe at all times all rules and safety requirements applicable to the premises notified to the Contractor by the Company Project Manager or the Vehicle Operator or his or its authorised representative. The Company Project Manager or the Vehicle Operator or his or its authorised representative may instruct the Contractor's personnel at any time to leave the premises in which event they shall do so immediately.

25.2 The Contractor acknowledges the Company's statutory duty to provide for secure, safe and efficient bus services and shall at all times during this Contract have regard to such duties and the Contractor shall not in the performance of this Contract in any manner endanger the safety of or interfere with the convenience of the public and shall minimise any disruption to the same.

25.3 In addition to the general requirements of Clauses 25.1 and 25.2 the Contractor shall comply and shall ensure the compliance of its sub-contractors with all Health and Safety Laws applicable to the performance of this Contract.

- 25.4 The Contractor shall be responsible for obtaining and keeping in force any licences, permissions or consents that may be necessary for the performance of this Contract from any relevant local authority or any other body including any licences, consents or other approvals to ensure compliance with the Framework Directive (Directive 2007/46/EC) and the Bus Directive (Directive 2001/85/EC) as applicable for buses to be used on a public road.
- 25.5 The Contractor:
- 25.5.1 shall promptly notify the Company of any health and safety hazards that are known by the Contractor or should have been known by the Contractor to exist or are likely to arise in connection with the Vehicles and/or Spare Parts;
 - 25.5.2 shall promptly notify the Company if the Contractor is required to make any change to the Vehicles and/or Spare Parts for the purposes of complying with its obligations under Clause 25.5.1;
 - 25.5.3 shall not unlawfully discriminate, and shall procure that the Contractor's personnel do not unlawfully discriminate within the meaning and scope of the Sex Discrimination Act 1975, Race Relations Act 1976, the Disability Discrimination Act 1995, Employment Equality (Sexual Orientation) Regulations 2003, Employment Equality (Religion or Belief) Regulations 2003, Employment Equality (Age) Regulations 2006 and any other relevant enactments in force from time to time in the Contractor's jurisdiction relating to discrimination in employment, to the extent that they are applicable to the Contractor;
 - 25.5.4 acknowledges that the Company is under a duty under section 71 of the Race Relations Act 1976 to have due regard to the need to eliminate unlawful racial discrimination and to promote equality of opportunity and good relations between persons of different racial groups. In performing its obligations under this Contract, the Contractor shall assist and cooperate with TfL and/or the Company where possible in satisfying this duty; and
 - 25.5.5 acknowledges that TfL is under a duty by virtue of a direction under section 155 in respect of section 404(2) of the Greater London Authority Act 1999 to have due regard to the need to:

25.5.5.1 promote equality of opportunity for all persons irrespective of their race, sex, disability, age, sexual orientation or religion;

25.5.5.2 eliminate unlawful discrimination; and

25.5.5.3 promote good relations between persons of different racial groups, religious beliefs and sexual orientation;

and in performing its obligations under this Contract, the Contractor shall assist and co-operate with the Company where possible to enable TfL to satisfy its duty.

In all cases, the costs of compliance with this Clause 25 shall be borne by the Contractor.

25.6 The Contractor has implemented a fair employment policy in compliance with all applicable Laws, which is set out in Schedule 10 (“**Contractor Policy**”). The Contractor shall at all times comply with the Contractor Policy as may be updated from time to time.

25.7 The Company’s workplace harassment policy (“**Company Policy**”) attached at Schedule 10, as up-dated from time to time (copies of which are available on request from the Company), requires the Company’s own staff and those of its contractors to comply fully with the Company Policy to eradicate harassment in the workplace. Without prejudice to Clauses 25.5 or 25.6, the Contractor shall, to the extent that the Contractor Policy does not address or deal with any issues relating to workplace harassment:

25.7.1 ensure that its staff, and those of its sub-contractors, are fully conversant with those requirements of the Company Policy;

25.7.2 fully investigate allegations of workplace harassment in accordance with the Company Policy; and

25.7.3 ensure that appropriate, effective action is taken where harassment is found to have occurred.

26. **CONFIDENTIALITY AND ANNOUNCEMENTS**

26.1 It is expected that the Parties will disclose to each other certain Confidential Information pursuant to this Contract and each Party recognises the value

and importance of the protection of the other's Confidential Information. All Confidential Information of one Party (the "**Disclosing Party**") that is disclosed to the other Party (the "**Recipient**") shall remain the sole property of the Disclosing Party (or its licensors), which shall own all rights (including Intellectual Property Rights), title, and interest in and to such Confidential Information.

26.2 "**Confidential Information**" means (i) all information related to any aspect of a Party's business (or its affiliates' businesses) which is either information not known by actual or potential competitors of such Party (or in the case of the Company, the TfL Group) or is proprietary information of such Party (or in the case of the Company, the TfL Group), whether of a technical nature or otherwise, (ii) any oral, written, graphic or machine-readable information that relates to patents, patent applications, research, product plans, products, developments, inventions (including Contractor inventions), processes, know-how, designs, drawings, engineering, formulae, markets, software (including source and object code), hardware configuration, computer programs, algorithms, regulatory information, chemical formulas, research plans, business plans and strategy, business opportunities, agreements with third parties, services, customers, suppliers, marketing, operations, business, affairs or finances of a Party, (iii) drawings and Product data, and (iv) any other information that is designated in writing by a Party to be confidential or proprietary provided, however, Performance Data shall not be deemed to be Confidential Information for the purposes of this Contract.

26.3 Subject to Clause 27, each Recipient agrees that, except as otherwise expressly contemplated herein, at all times and notwithstanding any termination or expiration of this Contract it will:

26.3.1 hold in strict confidence and not disclose to any third party Confidential Information of the Disclosing Party;

26.3.2 use the Confidential Information of the Disclosing Party only in accordance with this Contract; and

26.3.3 take all reasonable steps necessary to protect the Confidential Information of the Disclosing Party, which steps will include at least those taken by the Recipient to protect the Recipient's own confidential information of like kind, but in no event less than reasonable care.

1.1.2 Without derogating from the generality of the foregoing, the Recipient shall: (i) keep the Disclosing Party's Confidential Information in a safe and secure location; and (ii) only permit such access to Confidential Information of the Disclosing Party to those of the Recipient's employees or authorized representatives having a need to know and who, prior to obtaining such access, are bound by a written confidentiality agreement, with provisions to protect the Disclosing Party's Confidential Information at least as restrictive as those contained herein. Each Party shall be responsible for any breach of this Clause 26.3 by such Party's employees or authorised representatives.

26.4 Each Recipient's obligations under this Contract with respect to any portion of the Disclosing Party's Confidential Information shall terminate or not apply when the Recipient can prove that it:

26.4.1 is or subsequently becomes publicly available without breach of any obligation of confidentiality by the Recipient;

26.4.2 became known to the Recipient prior to the Disclosing Party's disclosure of such information to the Recipient;

26.4.3 became known to the Recipient from a source other than the Disclosing Party, and without breach of any obligation of confidentiality owed to the Disclosing Party;

26.4.4 was developed by the Recipient entirely independently of and without any reference to or use of any information communicated to the Recipient by the Disclosing Party; or

26.4.5 was communicated in response to a valid order by a court or other governmental body or necessarily disclosed pursuant to a statutory, legal or regulatory obligation, including any disclosure under FOI Legislation.

26.5 If the Recipient is required to disclose any of the Disclosing Party's Confidential Information pursuant to Clause 26.4.5, the Recipient will, as soon as reasonably practicable, provide the Disclosing Party with written notice of the applicable subpoena, law, regulation, order or rule so that the Disclosing Party may seek a protective order or other appropriate remedy. The Recipient and its representatives will cooperate fully with the Disclosing Party to obtain any such protective order or other remedy, if applicable. If the

Disclosing Party elects not to seek, or is unsuccessful in obtaining, any such protective order or other remedy in connection with any requirement that the Recipient disclose Confidential Information, then the Recipient may disclose such Confidential Information to the extent required provided however, that subject to Clause 27 the Recipient and its representatives will use their best efforts to:

26.5.1 disclose only the minimum amount of information required for compliance; and

26.5.2 ensure that such Confidential Information is treated confidentially by each person or entity to whom it is disclosed.

1.1.3 For the avoidance of doubt, nothing in this Clause 26.5 shall restrict or fetter the Company's rights and obligations under FOI Legislation and Clause 27.

26.6 Upon termination or expiration of this Contract for any reason, the Recipient shall promptly return to the Disclosing Party all documents and other tangible materials representing the Disclosing Party's Confidential Information and all copies thereof, purge all electronic copies or other representations thereof that are under the Recipient's direct or indirect control, and make no further use thereof except in relation to the Performance Data. This Clause 26 shall survive any termination or expiration of this Contract for any reason.

26.7 Confidential Information shall not be reproduced or used in any form or for any purpose except as required to implement this Contract. Any reproduction of any Confidential Information of the Disclosing Party by either Party shall remain the property of the Disclosing Party and shall contain any and all confidential or proprietary notices or legends which appear on the original, unless otherwise authorised in writing by the Disclosing Party.

26.8 The Contractor shall not without the prior written consent of the Company Project Manager advertise or announce that it is supplying the Vehicles and/or Spare Parts for the Company and the Company shall have the right to approve any advertisement or announcement before it is made.

27. **FREEDOM OF INFORMATION**

27.1 For the purpose of this Clause 27:

- 27.1.1 **“FOI Legislation”** means the Freedom of Information Act 2000 (**“FOI Act”**), all regulations made under it and the Environmental Information Regulations 2004 and any amendment or re-enactment of any of them; and any guidance issued by the Information Commissioner, the Department for Constitutional Affairs, or the Department for Environment Food and Rural Affairs (including in each case its successors or assigns) in relation to such legislation;
- 27.1.2 **“Information”** means information recorded in any form and by the Company or by the Contractor on behalf of the Company; and
- 27.1.3 **“Information Request”** means a request for any Information under the FOI Legislation.
- 27.2 The Contractor acknowledges that the Company:
- 27.2.1 is subject to the FOI Legislation and agrees to assist and co-operate with the Company to enable the Company to comply with its obligations under the FOI Legislation; and
- 27.2.2 may be obliged under the FOI Legislation to disclose Information without consulting or obtaining consent from the Contractor.
- 27.3 Without prejudice to the generality of Clause 27.2, the Contractor shall and shall procure that its sub-contractors shall:
- 27.3.1 transfer to the Contract Manager (or such other person as may be notified by the Company to the Contractor) each Information Request relevant to this Contract, the services supplied under it or any member of TfL Group that the Contractor or its sub-contractors (as the case may be) receive as soon as practicable and in any event within 2 Business Days of receiving such Information Request; and
- 27.3.2 in relation to Information held by the Contractor on behalf of the Company, provide the Company with details about and/or copies of all such Information that the Company requests and such details and/or copies shall be provided within 5 Business Days of a request from the Company (or such other period as the Company may reasonably specify), and in such form as the Company may reasonably specify.

- 27.4 The Company 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. The Contractor shall not itself respond to any person making an Information Request, save to acknowledge receipt, unless expressly authorised to do so by the Company.
- 27.5 The Company shall:
- 27.5.1 notify the Contractor of an Information Request within 10 Business Days from the date of receipt of the Information Request;
- 27.5.2 consult in good faith and in writing with the Contractor in determining:
- 27.5.2.1 whether compliance with the duty to confirm or deny under Section 1(1)(a) of the FOI Act would constitute an actionable breach of confidence for the purpose of Section 41(2) of the FOI Act, or would be likely to, prejudice commercial interests for the purpose of Section 43(3) of the FOI Act;
- 27.5.2.2 whether compliance with the duty to communicate Information requested under Section 1(1)(b) of the FOI Act would constitute an actionable breach of confidence for the purpose of Section 41(1)(b) of the FOI Act as would, or would be likely to, prejudice commercial interests for the purpose of Section 43(2) of the FOI Act;
- 27.5.2.3 whether Information requested is a trade secret for the purpose of Section 43(1) of FOI Legislation;
- 27.5.2.4 whether the public interest test in Section 2(1)(b) and Section 2(2)(b) of the FOI Act applies;
- 27.5.2.5 whether disclosure of the Information that is the subject of an Information Request would adversely affect (i) the Contractor's Intellectual Property Rights; (ii) the confidentiality of commercial or industrial information; or (iii) the interests of the Contractor, in each case for the purposes of paragraph 12(5) of the Environmental Information Regulations 2004.

28. INTELLECTUAL PROPERTY

28.1 Notwithstanding anything to the contrary expressed or implied in this Contract (save to the extent that the provisions relating to Interior Features Intellectual Property, Exterior Features Intellectual Property and/or Rear Platform Intellectual Property at Clauses 28.3, 28.4 and 28.6.2 are relevant), each Party and its licensor(s) are and shall remain the sole and exclusive owners of all rights, title and interest in and to such Party's Background Intellectual Property. "**Background Intellectual Property**" means any and all Intellectual Property developed, used, acquired or licensed by a Party or its affiliates (i) before the Effective Date of this Contract, or (ii) at any time, whether before, during or after the term of this Contract, which is not conceived, reduced to practice or otherwise made or developed under and pursuant to this Contract and shall include any Intellectual Property identified as Background Intellectual Property of that Party in Schedule 11. In respect of Background Intellectual Property, the Parties agree that:

28.1.1 the Contractor shall be entitled to designate certain Background Intellectual Property as being of such importance that it shall not be disclosed to any other third party provided always that (i) the Company (acting reasonably) agrees in writing with such designation (and for the avoidance of doubt the Contractor so designates, and the Company so agrees, that Background Intellectual Property in paragraph 2 of Schedule 11 as such), (ii) a description of the relevant Background Intellectual Property and the fact that it shall be confidential is included at Schedule 11, and (iii) such Background Intellectual Property does not form part of (nor is necessary for the exercise of the rights in) the Interior Features Intellectual Property, Exterior Features Intellectual Property and/or Rear Platform Intellectual Property;

28.1.2 all rights in Intellectual Property of a Party not expressly granted to the other Party under this Contract are reserved by such Party (or its licensors) and no additional or other rights (including without limitation implied licences) are granted to the other Party under this Contract;

28.1.3 the Contractor shall ensure that any Background Intellectual Property which belongs to a third party and which is licensed to the Contractor amongst other things for the purposes of its performance of this

Contract or otherwise utilised by the Contractor for those purposes by agreement with the owner of such rights shall be licensed or used on such terms that permit the Company to use such rights for the purposes set out in this Contract; and

28.1.4 the Contractor shall only use the Company's Background Intellectual Property for the purpose of performing this Contract and for no other purpose whatsoever.

28.2 With the exception of Exterior Features Intellectual Property and Interior Features Intellectual Property (which shall be owned by the Company and is dealt with at Clauses 28.3 and 28.4 below) and Rear Platform Intellectual Property (to the extent that it contains any Foreground Intellectual Property) all Intellectual Property Rights created in connection with the design, manufacture and supply of the Vehicles and Spare Parts under this Contract (and which therefore, and solely for the avoidance of doubt, excludes any and all Background Intellectual Property), ("**Foreground Intellectual Property**") will be the sole and exclusive property of the Contractor, including all rights to obtain, register, perfect and enforce Intellectual Property Rights but subject to the provisions of this Contract. The Parties agree that:

28.2.1 the Contractor will ensure that at all times it provides to the Company copies of all drawings, technical information and other documentation evidencing and comprising the Foreground Intellectual Property;

28.2.2 the Contractor will ensure that any and all Foreground Intellectual Property which is created and/or owned by a third party is assigned to the Contractor at the time of or as soon as possible after creation;

28.2.3 the Contractor is entitled to use the Foreground Intellectual Property in vehicles or parts supplied to third parties other than under or pursuant to this Contract. The Contractor acknowledges that the Foreground Intellectual Property has been or will be developed with the assistance of funds paid by the Company pursuant to this Contract. The Contractor and the Company have therefore agreed that if the Contractor intends to use or uses the Foreground Intellectual Property to design for and/or supply vehicles or parts to a third party other than pursuant to this Contract (a "**Third Party Product**"), then the Contractor shall only use the Foreground Intellectual Property for that purpose:

- 28.2.3.1 with the prior written consent of the Company (such consent not to be unreasonably withheld or delayed); and
 - 28.2.3.2 on condition and subject to the Contractor paying to the Company an amount (by way of royalty or otherwise) which reflects a fair and reasonable sum in the context of the proposed use of the Foreground Intellectual Property to reimburse the Company for its contribution to the development cost of the Foreground Intellectual Property in issue. It is agreed that it shall be reasonable for the Company to withhold consent under Clause 28.2.3.1 unless and until the amount or calculation of the amount payable to the Company under this Clause 28.2.3.2 has been agreed or determined;
- 28.2.4 in the event that any third party infringes or threatens to infringe the Foreground Intellectual Property then the Contractor shall be responsible at its own expense for bringing such timely action as necessary to enforce or protect the Foreground Intellectual Property including by commencing court action. Without prejudice to the foregoing, in the event that the Contractor does not take any such action then the Company shall be entitled to do so and the Contractor shall grant all such rights and give all such assistance to the Company as necessary to enforce or protect such rights; and
- 28.2.5 the Company agrees and acknowledges that the Company has no rights to use the Foreground Intellectual Property except as provided in this Contract.
- 28.3 The Contractor acknowledges that the Interior Features will be designed and fitted out in accordance with requirements specified by the Company and that all Interior Features Intellectual Property will be the sole property of the Company and shall not be used by the Contractor except for the production of Vehicles in accordance with this Contract. The Contractor shall ensure that all relevant rights (whether created or owned by the Contractor or by a third party including, for the avoidance of doubt, any such Intellectual Property Rights created and/or owned by an external design company) are assigned to the Company upon creation or as soon as possible thereafter to give effect to this clause. **“Interior Features”** means those elements of the visible interior design of the Vehicles (including the overall internal layout,

seating positions, fittings, “look and feel” and branding) that are original and distinctive (meaning not commonplace in the relevant design field). “**Interior Features Intellectual Property**” means any and all Intellectual Property irrespective of whether or not it contains Foreground Intellectual Property or the Contractor’s Background Intellectual Property and as may be developed, used, acquired or licensed by the Contractor in relation to the Interior Features.

- 28.4 The Contractor acknowledges that the Exterior Features will be designed in accordance with requirements specified by the Company and that all Exterior Features Intellectual Property will be the sole property of the Company and shall not be used by the Contractor except for the production of Vehicles in accordance with this Contract and the Contractor shall ensure that all relevant rights (whether created or owned by the Contractor or a third party including, for the avoidance of doubt, any such Intellectual Property Rights created and/or owned by an external design company) are assigned to the Company upon creation or as soon as possible thereafter to give effect to this clause. “**Exterior Features**” means those elements of the visible exterior design of the Vehicles (including the overall shape, form and configuration and constituent parts thereof) that are original and distinctive (meaning not commonplace in the relevant design field). “**Exterior Features Intellectual Property**” means any and all Intellectual Property irrespective of whether or not it contains Foreground Intellectual Property or the Contractor’s Background Intellectual Property and as may be developed, used, acquired or licensed by the Contractor in relation to the Exterior Features.
- 28.5 The Contractor agrees that it shall not provide (or grant the rights to manufacture to any third party) any parts or materials to any third party where the intention or effect is to manufacture a Third Party Product (as defined in Clause 28.2.3) which in the Company’s reasonable opinion creates the same overall impression as (or which has elements that are similar to elements of) the Vehicles. In the event that any third party infringes any of the Company’s rights in Exterior Features Intellectual Property and/or Interior Features Intellectual Property, the Contractor shall give all such assistance (at the Company’s expense) as the Company shall reasonably require in order to protect or enforce such rights.
- 28.6 It is understood and agreed between the Parties that in the event that the number of Vehicles delivered to the Company and/or a Vehicle Operator by the Contractor pursuant to this Contract exceeds 1,000 (one thousand) the

Company is entitled to appoint a third party to manufacture any such additional vehicles. The Contractor shall license such rights and do such other acts or things necessary to enable third parties to manufacture such additional vehicles and carry out the Future Operations set out at Clause 28.6.1 below. To give effect to the foregoing, on delivery of the 1,000th Vehicle to the Company and/or a Vehicle Operator, the Contractor shall, with effect from such delivery, grant to the Company (for such period as the Company requires) a non-exclusive, royalty-free, irrevocable, worldwide licence (which shall include the right to sublicense all of the following rights to Vehicle Operators or other third parties and/or their respective sub-contractors) to use:

28.6.1 the Foreground Intellectual Property to the extent necessary in order for the Company and/or such third parties as the Company shall specify to:

28.6.1.1 manufacture and supply vehicles complying with the Specification (as modified from time to time and which, for the avoidance of doubt, includes vehicles incorporating the Interior Features and Exterior Features) to the Company and/or Vehicle Operators;

28.6.1.2 manufacture and supply spare parts for Vehicles and vehicles manufactured and supplied pursuant to Clause 28.6.1.1 to the Company and/or Vehicle Operators;

28.6.1.3 operate, maintain and service the Vehicles and vehicles manufactured and supplied pursuant to Clause 28.6.1.1; and

28.6.1.4 to produce such duplicate tooling necessary for the purposes of Clauses 28.6.1.1 to 28.6.1.3,

together referred to as the “**Future Operations**” for the purpose of this Clause 28; and

28.6.2 (notwithstanding any of the provisions at Clause 28.6.1) the Rear Platform Intellectual Property in order for the Company (and/or such third parties as the Company shall specify) to carry out the Future Operations irrespective of whether or not Rear Platform Intellectual Property contains Foreground Intellectual Property and/or

Contractor's Background Intellectual Property (other than that specified in paragraph 2 of Schedule 11). "**Rear Platform Intellectual Property**" means any and all Intellectual Property developed, used, acquired or licensed by the Contractor in relation to the design of the rear opening platform and, solely to the extent designed for the Vehicles, the powered doors of the Vehicle,

1.1.4 and the Company may assign such rights in this Clause 28.6 as specified above to any nominee or successor.

- 28.7 In the event that the rights granted by the Contractor under Clauses 28.6.1 and 28.6.2 are insufficient to enable such third parties as are approved by the Company to manufacture the Exterior Features and Interior Features of the Vehicles then the Contractor shall licence such further rights and do such other acts or things necessary (including licensing such of the Contractor's Background Intellectual Property as may be necessary with the exception of that specified in paragraph 2 of Schedule 11) in order to allow the manufacture of the Exterior Features and Interior Features in order that the design and overall impression created is the same as for the Vehicles. For the avoidance of doubt, provided that the foregoing is satisfied (and other than as set out elsewhere in this Clause 28) the Contractor shall not be required to licence its Background Intellectual Property.
- 28.8 In addition to the licence referred to at Clause 28.6 above and to enable third parties to manufacture Vehicles complying with the Specification (as from time to time modified) and to carry out the Future Operations detailed in Clause 28.6.1 the Contractor will provide the Company and third parties nominated by the Company with copies of the Operating Information (including appropriate details relating to the Exterior Features and Interior Features) and such drawings and other technical information and assistance as the Company specifies or as is reasonably required to enable the Company to carry out a tendering process for the provision of additional Vehicles and for the Company and such third parties to carry out the Future Operations detailed in Clause 28.6.1.
- 28.9 The Contractor shall ensure that any Intellectual Property Rights which belong to a third party and which are licensed to the Contractor among other things for the purposes of its performance of this Contract or otherwise utilised by the Contractor for those purposes by agreement with the owner of

such rights shall be licensed or used on such terms that permit the Company to use such rights for the purposes set out in Clause 28.6.

- 28.10 Any and all sums paid to third parties in respect of the use of any Intellectual Property Rights connected with the performance of the Contractor's obligations under this Contract shall be paid by the Contractor.
- 28.11 Subject to the terms of Clause 28.7 and this Clause 28.11, the Contractor hereby grants to the Company and Vehicle Operators (and third parties licensed in accordance with Clause 28.6) a non-exclusive, right and licence to use the Operating Information and any modifications made by the Contractor thereto, for the purposes of producing, maintaining, operating and repairing Products. The Company may copy, modify, create enhancements, or create derivative works of the Operating Information or any part thereof, without the Contractor's prior written consent.
- 28.12 The Contractor hereby (subject to the provisions of Clause 20.6) grants to the Company a perpetual, non-exclusive, transferable and royalty-free licence under the Contractor's interest in the Performance Data to use any Performance Data learned by the Company (which, for the purpose of this Clause 28.12 shall include use by the Company Affiliates and the UK Government (including the Department for Business, Innovation and Skills), as may be reasonably necessary in the context of the purposes of this Contract.
- 28.13 In respect of the use of trade marks:
- 28.13.1 the Company agrees to allow the Contractor to place identifying Contractor Marks (including decals) on an exterior side of each Vehicle. The Parties shall mutually agree in writing on the placement and size of the Contractor Marks to be affixed on each Vehicle;
- 28.13.2 the Contractor shall not use Company Marks without the express written permission of the Company (which may be withheld for any reason whatsoever). In the event that such permission is granted the provisions of this Clause 28.13 shall apply (in addition to any further provisions detailed at the time of such approval and grant of rights);
- 28.13.3 the Contractor permits the Company to use Contractor Marks in such manner as the Company reasonably requires on a royalty free, non-exclusive, transferable basis for the purpose of publicity and

marketing bus services in London and for other purposes ancillary to the operation of the Vehicles (including as may be required under Clause 28.13.4 below);

28.13.4 the Contractor permits the Company to use the Foreground Intellectual Property for the purposes of producing and/or selling and/or licensing for production and sale likenesses of the Vehicle including merchandising such as greetings cards and model vehicles;

28.13.5 as between the Company and the Contractor, each Party acknowledges that the other Party is the owner of their respective Marks and all Intellectual Property Rights therein and goodwill associated therewith, and each Party agrees to do nothing inconsistent with such ownership;

28.13.6 either Party, at its discretion, may terminate its respective trademark licence (to the extent granted by either Party under this Clause 28.13) if at any time such Party determines that the other Party is using the such Party's Marks in a manner that violates such Party's then in effect trademark policy. Neither Party will attempt to register or adopt or use the other Party's Marks, or any name, design or symbol confusingly similar thereto, as part of or in connection with such Party's business, and will not include the other Party's Marks in any design, symbol, product, service, letterhead, business card or other means of identification. Promptly following termination or expiration of this Contract for any reason, each Party shall take all actions necessary to transfer and assign to the other Party all rights, title and interest in and to the other Party's Marks and goodwill related thereto which such Party may have acquired as a result of this Contract and shall promptly discontinue all uses of the other Party's Marks. Each Party shall cooperate (at the other Party's expense) with the other Party if the other Party (or its licensors) wishes to register its respective Marks in any jurisdiction, including without limitation execute appropriate documents and provide other reasonable assistance which the other Party (or its licensors) may reasonably require to that end;

28.13.7 the Contractor acknowledges that the name by which the Vehicles will be known will be determined by the Company and will be the Intellectual Property of the Company and that the Contractor will

have no right to use that name except in relation to the performance of this Contract and in particular but without limitation the Contractor shall not use that name in conjunction with any vehicles or parts produced for any third party including any Third Party Product (as defined in Clause 28.2.3).

28.14 The licences set out in this Clause 28 shall survive any termination or expiration of this Contract.

29. **AMBUSH MARKETING**

The Contractor shall not (without the prior written approval of the London Organising Committee of the Olympic Games Limited ("**LOCOG**") in each case) represent that any products or services provided under this Contract have been endorsed or approved by the Company, the British Olympic Association, the British Paralympic Association, LOCOG or any other official Olympic or Paralympic body, or that the Contractor (including any of its products or services) are in any way associated with those organisations, the Olympic Games and/or Paralympic Games, or London 2012, including by publishing or issuing any statement (factual or otherwise) about the Contractor's provision of the products or services to the Company.

30. **RECORDS**

30.1 The Contractor shall, and shall procure that its sub-contractors shall:

30.1.1 maintain a complete and correct set of records pertaining to all activities relating to the performance of this Contract and the Contractor's obligations under this Contract and all transactions entered into by the Contractor for the purposes of this Contract (including time-sheets for the Contractor's personnel where such records are material to the calculation of any prices) ("**Records**");

30.1.2 retain all Records during this Contract and for a period of not less than 6 years (or such longer period as may be required by Law) following termination or expiry of this Contract ("**Retention Period**"); and

30.1.3 no more frequently than twice every twelve (12) months, permit an independent audit of the Records by an independent auditor engaged by the Company for the sole purpose of verifying the Contractor's

compliance with the applicable government rules and regulations (which may include a review of the financial terms and conditions of this Contract). Such audit shall be requested with at least ten (10) Business Days' prior written notice, conducted during normal business hours, and situated on the premises of the Contractor. The Contractor shall give all reasonable assistance to the auditors in conducting such inspection, including making available documents and staff for interview.

31. BEST VALUE AND RESPONSIBLE PROCUREMENT

31.1 The Contractor acknowledges that TfL is a best value authority for the purposes of the Local Government Act 1999 and as such TfL is required to make arrangements to secure continuous improvement in the way it exercises its functions, having regard to a combination of economy, efficiency and effectiveness, as such, the Contractor shall, where reasonably requested by the Company, provide reasonable cooperation to the Company in connection with any best value review being conducted by the Company that is related to this Contract.

31.2 The Contractor shall comply with the requirements of Schedule 13 regarding responsible procurement and strategic labour needs and training in the performance of its obligations under this Contract. The Company shall not be liable to the Contractor for any costs, charges or expenses arising out of or associated with compliance with Schedule 13.

32. INDEMNITY, INSURANCE & LIMITATION OF LIABILITY

32.1 Indemnity

32.1.1 The Contractor shall indemnify, defend and hold the Company and each member of the TfL Group and their respective officers, directors and employees, harmless from any and all liabilities, losses, costs, damages and expenses, including reasonable legal fees, that the Company or a member of the TfL Group suffers or incurs itself or that the Company or a member of the TfL Group suffers or incurs in connection with any suit, claim, action or demand ("**Claim**") by a third party arising in any case from or relating to (i) the death or injury to a person, or the loss or damage to property, that is caused by the Contractor's performance, non-performance or part-performance of its obligations pursuant to this Contract, or (ii) actions or omissions of

the Contractor, its employees or agents while on the Company's premises. The Contractor's liability under this Clause 32.1.1 shall be reduced proportionately to the extent such Claim results from the negligence of the Company, its employees or agents or a member of the TfL Group.

32.1.2 The Contractor shall indemnify, defend and hold the Company and each member of the TfL Group and their respective officers, directors and employees, harmless from any and all liabilities, losses, costs, damages and expenses, including reasonable legal fees, that the Company or a member of the TfL Group suffers or incurs itself or that the Company or a member of the TfL Group suffers or incurs in connection with any Claim by a third party arising in any case from or relating to any allegation that the manufacture, supply or use of the Vehicles or any Spare Parts infringes the Intellectual Property Rights of a third party. In the event of a Claim against the Company or a member of the TfL Group covered by this Clause 32.1.2, or if the Contractor reasonably believes such a Claim against the Company or a member of the TfL Group is likely, without prejudice to the foregoing indemnity the Contractor may, in its sole discretion (i) modify the Products so that they are no longer infringing but functionally equivalent; (ii) replace the infringing Vehicle component or Spare Part with a non-infringing version of the Vehicle component or Spare Part which is functionally equivalent; or (iii) obtain a licence for the Company and Vehicle Operator to continue using the Products as provided and envisaged in this Contract.

32.2 Insurance

32.2.1 Subject to Clause 32.2.2, without prejudice to its liability to indemnify the Company under Clause 32.1 or any other provision of this Contract, the Contractor shall arrange and maintain from the date of this Contract and for so long as any Vehicle remains in service:

32.2.1.1 public liability insurance in the sum of not less than £20 million (twenty million Pounds Sterling) per occurrence, such insurance to include conventional "indemnity to principal" and "financial loss" extensions and to cover injury and damage arising out of maintenance, defective parts and defective servicing;

- 32.2.1.2 product liability insurance in the sum of not less than £20 million (twenty million Pounds Sterling) in the aggregate with at least one option to reinstate the sum insured if the limit is eroded, such insurance to include conventional “indemnity to principal”, “financial loss” and “total loss” extensions; and
- 32.2.1.3 employer’s liability insurance in the sum of the higher of £10 million (ten million Pounds Sterling) and the sum required by law;

with an insurer or insurers authorised to underwrite such risks in the United Kingdom, and on terms approved by the Company (collectively the “**Required Insurances**”). Where the Required Insurances contain a care, custody or control exclusion (or they are not otherwise covered) the Contractor shall as soon as reasonably practicable and, in any event, within a period of ten (10) Business Days from the date of this Contract amend the relevant policy so as to make it clear that any premises (including contents and vehicles) owned or occupied by the Company or a Vehicle Operator and where the Contractor is performing this Contract shall not be deemed to be within the Contractor’s care, custody or control.

- 32.2.2 The Contractor shall ensure that it has arranged and implemented the financial loss extensions to the Required Insurances set out in Clauses 32.2.1.1 and 32.2.1.2 as soon as reasonably practicable and, in any event, within a period of ten (10) Business Days from the date of this Contract, provided that if such financial loss extension is prohibitively costly to the Contractor, the Contractor shall immediately notify the Company (providing the Company with all information reasonably requested) and the Company shall be entitled, at its option, to require the Contractor to implement a reasonable alternative to or variation of such financial loss extensions.
- 32.2.3 The Contractor shall ensure that the Required Insurances cover the Contractor’s legal liability (including liability assumed under this Contract) which may arise out of or in the course of or by reason of the Contractor’s performance, non-performance or part-performance of this Contract and extend to indemnify the Company as principal.

- 32.2.4 The Contractor shall provide evidence satisfactory to the Company on or before the commencement of this Contract and each anniversary thereof that the Required Insurances have been effected and are in force.
- 32.2.5 The Contractor shall comply with the terms and conditions of the Required Insurances and all reasonable requirements of the insurers, including without limitation, in connection with the prosecution, defence and settlement of claims, the recovery of losses and the prevention of accidents. The Contractor shall bear the cost of all exclusions and limitations under the Required Insurances.
- 32.2.6 The Contractor agrees that the Company shall have the right to control and to supervise all dealings with the press and any other media in relation to any incident or event related to this Contract or the Vehicles or Spare Parts resulting in a claim under the Required Insurances provided that the Company shall not make any public statement that would vitiate the insurance coverage maintained by the Contractor under the terms of this Contract.

32.3 Limitation of liability

32.3.1 To the maximum extent allowed under English law:

- 32.3.1.1 in no event shall either Party be liable to the other Party or any other person or entity for any special, consequential, indirect or punitive damages, however caused, arising out of or resulting from this Contract, the products or services sold pursuant to this Contract or the software or documentation licensed pursuant to this Contract, regardless of the form of action, whether for breach of contract, breach of warranty, tort, negligence, strict product liability or otherwise (including damages based on loss of profits, data, files or business interruption or opportunity), and whether or not such Party has been advised of the possibility of such damages; provided, however, that this Clause 32.3.1.1 does not limit the Company's right to receive liquidated damages under Clause 11 of this Contract; and

32.3.1.2 in no event shall either Party's liability to the other Party or any third party for any claim arising from or relating to this Contract, whether in contract, tort, liquidated damages or any other theory of liability, exceed £20,000,000 (twenty million Pounds Sterling) per claim or event (the "**Liability Cap**");

provided that nothing in this Clause 32.3.1 shall operate to exclude or limit any liability of either Party:

- (a) for breach of Clause 26 (Confidentiality) or Clause 28 (Intellectual Property); or
- (b) in relation to their respective indemnities set out in Clause 32.1 (indemnities); or
- (c) for death or personal injury caused by that Party's negligence.

32.3.2 The Parties acknowledge and agree that the foregoing provisions of this Clause 32.3 are reasonable.

32.4 For the avoidance of doubt, the Contractor acknowledges and agrees that neither the Company nor any member of the TfL Group shall be liable to the Contractor whether in contract, quasi-contract or tort (including negligence), or for breach of statutory duty, restitution or otherwise in respect of any act or omission of any Vehicle Operator.

33. **TERMINATION**

33.1 Termination For Convenience

Notwithstanding any other provision of this Contract, this Contract or any part of it may be terminated by the Company upon not less than sixty (60) Business Days notice to the Contractor at any time, provided that the provisions of this Clause 33.1 shall not apply for the period from the date of this Contract until the date of the delivery of the last Production Vehicle ordered pursuant to Clause 7A.

33.2 Termination for Default by Contractor

33.2.1 The Company may, subject to the provisions of Clause 33.2.2, terminate this Contract or any part of it by written notice to the

Contractor in the event any one of the following circumstances occurs:

- 33.2.1.1 the Contractor is subject to an Insolvency Event;
- 33.2.1.2 the Contractor commits any persistent or material breach of any term of this Contract, including without limitation, (i) failure of the Vehicles to pass the tests in accordance with Clauses 5, 6.4 and 7, (ii) the Company is not reasonably satisfied on the issue of any conflict of interest in accordance with Clause 22, or (iii) any Products developed or supplied under this Contract infringe the Intellectual Property Rights of a third party;
- 33.2.1.3 the Contractor gives promises or offers any gift, loan, reward or advantage whatsoever to any member, officer or servant of the Company;
- 33.2.1.4 the Contractor fails to make delivery of the static mock up, the Prototype Vehicle or the initial five (5) Production Vehicles within the time specified in the Project Milestones or as otherwise agreed (including any extension thereof);
- 33.2.1.5 the Contractor's failure to deliver a Vehicle on the agreed delivery date in accordance with Clause 11.6.

33.2.2 The Contractor will be given the opportunity to cure any default under Clauses 33.2.1.2 or 33.2.1.4 within a period of thirty (30) Business Days (or such longer period as the Company may reasonably authorise in writing) after notice of default has been given to the Contractor by the Company, such notice to specify the default and requiring its remedy. If the Contractor fails to remedy such default in accordance with the Company's notice or, subject to Clause 33.2.6, fails to provide a Remediation Plan to the Company in accordance with Clause 33.2.3, the Company may terminate this Contract immediately on written notice to the Contractor.

33.2.3 If the Contractor cannot reasonably cure any default under Clauses 33.2.1.2 or 33.2.1.4 within the thirty (30) Business Day cure period set out in Clause 33.2.2, the Contractor shall submit a Remediation Plan to the Company within ten (10) Business Days of the

commencement of such period. The Remediation Plan shall set out the:

33.2.3.1 reasons for the default; and

33.2.3.2 steps necessary to remedy the default in order to comply with the terms of this Contract and to reasonably ensure that such default does not occur again; and

33.2.3.3 timescales in which the Contractor proposes to implement and complete the necessary steps set out in Clause 33.2.3.2 above.

33.2.4 Upon receipt of the Remediation Plan the Company will review the Remediation Plan and consult with the Contractor and if:

33.2.4.1 the Remediation Plan is approved, the Contractor will immediately implement the Remediation Plan in accordance with the terms of and timescales set out in the Remediation Plan;

33.2.4.2 the Company directs the Contractor to make modifications to its proposed Remediation Plan, the Contractor shall promptly make such amendments and shall implement the revised Remediation Plan in accordance with the terms of and timescales set out in the revised Remediation Plan.

33.2.5 If the Contractor fails to implement the Remediation Plan (including any revised Remediation Plan under Clause 33.2.4.2) and/or fails to remedy the default in accordance with the timescales set out in the Remediation Plan (including any revised Remediation Plan), then the Company shall be entitled to terminate this Contract immediately on written notice to the Contractor.

33.2.6 Notwithstanding the provisions of Clauses 33.2.3 to 33.2.5, in the event that the Contractor has failed to remedy a material breach of this Contract within the thirty (30) Business Day cure period set out in Clause 33.2.2, the Company reserves the right to terminate this Contract for such default immediately on written notice to the Contractor.

33.3 Termination for Default by the Company

33.3.1 The Contractor may, subject to the provisions of Clause 33.3.2, terminate this Contract in the event any one of the following circumstances occurs:

33.3.1.1 the Company is subject to an Insolvency Event;

33.3.1.2 the Company materially fails to perform any of its obligations under this Contract and the Contractor is materially harmed by such failure; or

33.3.1.3 the Company fails to make any payment to Contractor within the time specified in this Contract (including any extension thereof).

33.3.2 The Company will be given the opportunity to cure any default within a period of thirty (30) Business Days (or such longer period as the Contractor may reasonably authorise in writing) after notice of default has been given to the Contractor by the Company such notice to specify the default and require its remedy; provided that if the Company cannot reasonably cure such default within such thirty (30) Business Day cure period, the Company shall, prior to the expiration of such period, notify the Contractor in writing, setting out a plan for curing such default and a schedule and time certain by which such cure will be achieved. Upon receipt of such a notice and consultation with the Company, the Contractor may (i) authorise the Company to proceed with the cure in accordance with its proposed plan and schedule; (ii) direct the Company to make modifications in its proposed plan and/or schedule; or (iii) reject such plan and terminate this Contract for default if the Company will not be able to cure such default in a timely manner.

33.4 Termination in Connection with Force Majeure Event

33.4.1 Neither Party shall be deemed to be in breach of this Contract or otherwise liable to the other Party in any manner whatsoever for any failure or delay in performing its obligations under this Contract to the extent that such failure or delay is due to a Force Majeure Event. If on the expiry of six months after the occurrence of a Force Majeure Event where the Force Majeure Event is continuing and has a material adverse effect on:

33.4.1.1 the Contractor's performance of this Contract then for as long as such Force Majeure Event continues and has that effect the Company shall have the option to terminate all or part of this Contract by 30 Business Days' written notice; or

33.4.1.2 the Company's performance of its obligations under this Contract, then, for as long as such Force Majeure Event continues and has that effect, the Contractor may terminate this Contract in its entirety by 30 Business Days' written notice.

33.5 Termination in Connection with Change of Control

The Company may terminate this Contract in accordance with Clause 21.3 in the event of a Change of Control.

33.6 The rights to terminate this Contract given by this Clause 33 shall not prejudice any other right or remedy (under this Contract or at common law) of either Party in respect of the breach concerned (if any) or any other breach.

34. **CONSEQUENCES OF TERMINATION**

34.1 On any termination of this Contract or any part of it under Clause 33 or Clause 7A.13.5:

34.1.1 the Contractor shall take immediate steps to bring to an end the performance of this Contract (or if applicable the relevant part which has been terminated) in an orderly manner but with all reasonable speed and economy, and shall deliver to the Company all Operating Information (whether complete or incomplete) required under this Contract. The licence to use the Operating Information shall survive any such termination;

34.1.2 the Contractor shall deliver up to the Company all documents and records relating to or otherwise in connection with this Contract, including the Records and a copy of all relevant records in whatever format the Company may reasonably require and all property and materials supplied by or on behalf of the Company, including any Confidential Information and Intellectual Property Rights of the Company or any member of the TfL Group; and

- 34.1.3 the Company shall pay to the Contractor any sums remaining due to the Contractor in relation to the Products and services supplied by the Contractor in accordance with this Contract (or that part of the Contract which has been terminated if applicable) up to the date of termination calculated so far as possible in accordance with Schedule 4.
- 34.2 If the Company terminates this Contract under Clause 33.1 the Company shall pay to the Contractor the Early Termination Charges provided that:
- 34.2.1 the Contractor has taken all reasonable steps to mitigate the Early Termination Charges including by:
- 34.2.1.1 appropriating employees, assets and resources for other purposes. For the avoidance of doubt, to the extent that employees, assets and/or resources are appropriated for other purposes the Early Termination Charges shall be reduced by an equitable amount; and
- 34.2.1.2 exercising its rights of cancellation or termination (in whole or part) under applicable third party contracts or, if so required by the Company, using all reasonable endeavours to assign or novate any such third party contracts to the Company or its nominee; and
- 34.2.2 the Contractor complies with the Company's directions as to the completion or non-completion of orders pending at the date notice of termination is served by the Company; and
- 34.2.3 such sum shall be reduced to the extent that any payments or other monies paid or payable to the Contractor under this Contract already reflect any element of the Early Termination Charges to ensure that there is no double recovery by the Contractor.
- 34.2.4 The Company shall within thirty (30) days of receipt of an agreed invoice therefor in accordance with, and subject to the provisions of, Clause 17 reimburse the Contractor for the Early Termination Charges as demonstrated by the Contractor to the reasonable satisfaction of the Company. The Contractor shall provide to the Company all information and documentation reasonably requested to verify the Early Termination Charges. For the avoidance of doubt, the

Early Termination Charges will not become due or payable in relation to any other event of termination howsoever arising, or on the expiry, of this Contract.

34.3 If the Company terminates this Contract under Clause 33.1 or Clause 33.2 or Clause 33.4:

34.3.1 the licences granted to the Company and/or Vehicle Operators or third parties under Clause 28 shall continue in full force and effect notwithstanding the termination of this Contract; or

34.3.2 where the licences referred to in Clause 34.3.1 have not yet been granted under the terms of this Contract, the Contractor shall grant such licences in accordance with Clause 28 with effect on and including the date of termination and such licences shall continue in full force and effect thereafter notwithstanding the termination of this Contract,

provided that where termination occurs under Clause 33.1 prior to 1,000 Vehicles being ordered pursuant to Clause 28.6, the Company undertakes to the Contractor that if the Company's requirement for the Vehicles is restored, the Company shall enter into a new contract with the Contractor on substantially the same terms as this Contract for the manufacture and supply of such Vehicles.

34.4 If the Contractor becomes subject to an Insolvency Event entitling the Company to terminate this Contract under Clause 33.2.1.1, the Contractor shall immediately assign with full title guarantee to the Company (or its nominee) at no charge or royalty the Foreground Intellectual Property (and, to the extent not already done, the Interior Features Intellectual Property and Exterior Features Intellectual Property), together with the right to sue for past infringement and the Contractor shall take all such steps and do all such things, including executing all documents, as may be necessary to vest all such Foreground Intellectual Property and Interior Features Intellectual Property and Exterior Features Intellectual Property in the Company (or its nominee).

34.5 The payment of the Early Termination Charges in accordance with Clause 34.2 shall be in full and final settlement of any liability which the Company may have to the Contractor as a consequence of or arising out of termination of this Contract by the Company under Clause 33.1.

34.6 Claims for breach of this Contract shall be settled in accordance with Clause 47. Any termination of this Contract or any part of it shall be without prejudice to the accrued rights and remedies of either Party in respect of any negligence, omission or default of the other prior to such termination.

35. **VARIATIONS**

35.1 This Contract may only be amended or modified by written agreement duly executed by both of the Parties (including variation forms executed by both of the Parties) provided, for the avoidance of doubt, that only employees of the Company shall be entitled to execute any such agreement, not any consultant or contractor of the Company. Notwithstanding anything to the contrary expressed or implied in this Contract, each Party agrees and acknowledges that nothing in any purchase order (or similar commercial document) received by either Party may vary or modify anything expressed or implied in this Contract, unless the Parties previously execute a written amendment to this Contract to the contrary, that expressly references this Clause 35.1.

35.2 At any time during the term of this Contract the Parties may agree in writing to variations or modifications to this Contract. All variations to the Contract, including the Specification, shall be dealt with in accordance with the procedures set out in this Clause 35 and Schedule 12.

36. **CORRUPT GIFTS AND PAYMENT OF COMMISSION**

The Contractor 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 the Company or any member of the TfL Group nor favour any employee, officer or agent of the Company or any member of the TfL Group with gifts or entertainment of significant cost or value nor enter into any business arrangement with employees, officers or agents of the Company or any member of the TfL Group other than as a representative of the Company, without the Company's prior written approval.

37. **WAIVER**

Failure by any Party at any time to enforce any of the provisions of this Contract shall not be construed as a waiver by such Party of such provisions or in any way affect the validity of this Contract or any part thereof.

38. ENTIRE AGREEMENT

- 38.1 Subject to Clause 38.5 and without prejudice to the Contractor's obligations under this Contract, the Contractor shall be responsible for and shall make no claim against the Company in respect of any misunderstanding affecting the basis of the Contractor's tender in respect of this Contract or any incorrect or incomplete information howsoever obtained; provided, however, the Contractor may rely on all information contained in this Contract and its Schedules, including the Specification.
- 38.2 This Contract constitutes the whole and only contract between the Parties relating to the subject matter of this Contract and supersedes and extinguishes any prior drafts, agreements, undertakings, representations, warranties and arrangements of any nature whatsoever, whether or not in writing, relating thereto.
- 38.3 Each Party acknowledges that in entering into this Contract it is not relying upon any representation, warranty, promise or assurance made or given by any other Party or any other person, whether or not in writing, at any time prior to the execution of this Contract which is not expressly set out herein.
- 38.4 The Contractor:
- 38.4.1 acknowledges that it has sufficient information about the Company and the Specification and that it has made all appropriate and necessary enquiries to enable it to perform its obligations in accordance with this Contract;
- 38.4.2 shall neither be entitled to any additional payment nor excused from any obligation or liability under this Contract due to any misinterpretation or misunderstanding by the Contractor of any fact relating to the Specification or otherwise to this Contract provided that the Contractor is only responsible for satisfying written obligations or requirements that are specifically set out in this Contract, including the Specification; and
- 38.4.3 shall comply with all lawful and reasonable directions of the Company relating to its performance of its obligations and this Contract.
- 38.5 Nothing in Clauses 38.1 and 38.3 or otherwise in this Contract shall exclude any liability for fraudulent misrepresentation.

38.6 Notwithstanding anything to the contrary in this Contract, the Company's discretion in carrying out its statutory duties shall not be fettered or otherwise affected by any provision of this Contract.

39. RELATIONSHIP OF THE PARTIES

39.1 Nothing in this Contract constitutes, or shall be deemed to constitute, a partnership between the Parties. Except as expressly provided in this Contract, neither Party shall be deemed to be the agent of the other.

39.2 Each Party warrants and represents to the other Party that it is entering into this Contract as principal and not as agent for any person and that it will act as an independent contractor in carrying out its obligations under this Contract.

39.3 Subject to any express provisions to the contrary in this Contract, the Contractor has no right or authority to and shall not do any act, enter into any contract, make any representation, give warranty, incur any liability, assume any obligation, whether express or implied, of any kind on behalf of the Company or bind the Company in any way.

39.4 Subject to any express provisions to the contrary in this Contract, the Company has no right or authority to and shall not do any act, enter into any contract, make any representation, give any warranty, incur any liability, assume any obligation, whether express or implied, of any kind on behalf of the Contractor or bind the Contractor in any way.

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

40. SEVERABILITY

If any provision of this Contract shall become or be declared illegal, invalid or unenforceable, in whole or in part, for any reason whatsoever, such provision or part thereof shall be divisible from this Contract and shall be deemed to be deleted from this Contract in so far as the continued operation of this Contract is concerned provided always that if such deletion substantially affects or alters the commercial basis of this Contract, the Parties shall negotiate in good faith to amend and modify the provisions and terms of this Contract as may be necessary or desirable in the circumstances.

41. **SURVIVAL**

The provisions of Clauses 1, 7.5, 9, 12.1, 14, 16.4, 18, 24.1, 24.2.3, 25.5.1, 25.5.2, 26, 27, 28, 29, 30.1.2, 32, 34, 37-42 (inclusive), 44, 46 and 47 shall survive the expiry or termination of this Contract and continue in full force and effect in accordance with their terms, along with any other Clauses or Schedules of this Contract necessary to give effect to them.

42. **NOTICES**

42.1 Any notice or other documents to be given under this Contract shall be in writing and shall be deemed to have been duly given if delivered by hand or sent by first class pre-paid post to:

42.1.1 in the case of the Company, the Company Manager, London Bus Services Limited, Palestra, 197 Blackfriars Road, London SE1 8NJ (email: [REDACTED]) with a copy to General Counsel, Transport for London, Windsor House, 42-50 Victoria Street, London SW1H 0TL (email: [REDACTED]); and

42.1.2 in the case of the Contractor, Mark Nodder, Wrightbus Limited, Galgorm Industrial Estate, Fenaghy Road, Galgorm, Ballymena, County Antrim BT42 1PY (email: [REDACTED]).

Or such other address as one Party may from time to time designate by written notice to the other. A Party may give a notice under this Contract by email to the email address stated above provided that such notice shall not be valid unless a confirming copy is sent by first class pre-paid post to the other Party within 24 hours after sending and no notification informing the sender that the message has not been delivered has been received by the sender.

43. **LANGUAGE**

English shall be the language of this Contract and all documentation or information required or produced in the course of or in connection with the Contractor's performance shall be in English.

44. **THE CONTRACTS (RIGHTS OF THIRD PARTIES) ACT 1999**

44.1 Subject to Clause 44.2, save for any member of the TfL Group, Company Affiliate and Vehicle Operators who shall have the benefit of all rights set out

in this Contract, any third party who is not a Party to this Contract shall have no rights under the Contracts (Rights of Third Parties) Act 1999 to enforce any of its terms.

44.2 For the avoidance of doubt:

44.2.1 the following clauses of this Contract shall not apply to Vehicle Operators: Clauses 10, 11, 15, 17, 18 and paragraphs 2, 3, 4, 6 and 14 of Schedule 4 and Schedule 6;

44.2.2 the obligation on the Contractor to supply Production Vehicles to Vehicle Operators shall not apply to any Vehicle Operator who the Company has agreed with the Contractor (each Party acting reasonably) is a credit risk under Clause 44.3 and where there is no reasonable option to deal with such risk available to the Contractor. For the avoidance of doubt, if the Contractor chooses to supply a Vehicle Operator who is an agreed credit risk, then the terms of this Contract shall apply, subject to Clause 44.2.1.

44.3 If the Contractor (acting reasonably) considers that a Vehicle Operator is a potential credit risk in relation to payment for Production Vehicles, the Contractor shall promptly notify the Company of its concerns and the reasons therefor and provide the Company with all information reasonably requested to verify the Contractor's concerns. The Parties shall meet to review and discuss the issue and any reasonable options available to the Contractor to deal with such risk, including advanced or staged payments, and shall agree (both Parties acting reasonably) how to proceed with such Vehicle Operator.

45. **ASSIGNMENT AND NOVATION**

The Contractor shall not assign or novate all or any part of this Contract without the prior written consent of the Company (consent may be refused or given with such conditions as the Company thinks fit). The Company may assign or novate all or any part of this Contract (including the warranties) at any time to any member of the TfL Group or any third party in the public sector without the consent of the Contractor, provided that, in the case of warranty assignment, such warranty assignment also includes the transfer of the applicable Vehicle to the same third party.

46. **GOVERNING LAW**

- 46.1 This Contract shall in all respects be construed and governed by English Law.
- 46.2 Without prejudice to Clause 47, the Parties submit to the exclusive jurisdiction of the courts of England and Wales.

47. **DISPUTE RESOLUTION**

- 47.1 The Company and the Contractor shall use all reasonable endeavours to negotiate in good faith and settle any dispute or difference that may arise out of or relate to this Contract ("**Dispute**") before resorting to litigation.
- 47.2 If the Dispute is not settled through discussion between the Company Manager and the Contractor's Representative within a period of seven Business Days of the date on which the Dispute arose, the Parties may refer the Dispute in writing to a director or chief executive (or equivalent) ("**Senior Personnel**") of each of the Parties for resolution.
- 47.3 If the Dispute is not resolved within 14 Business Days of referral to the Senior Personnel, either Party may propose by notice to the other Party ("**Notice**") that a structured mediation or negotiation be entered into with the assistance of a mediator.
- 47.4 If the Parties are unable to agree on a mediator, or if the agreed mediator is unable or unwilling to act within 28 Business Days of the service of the Notice, either Party may apply to the Centre for Effective Dispute Resolution ("**CEDR**") in London to appoint a mediator. The costs of that mediator shall be divided equally between the Parties or as the Parties may otherwise agree in writing.
- 47.5 Where a dispute is referred to mediation under Clause 47.3, the Parties will attempt to settle such Dispute by mediation in accordance with the model mediation procedures published by CEDR or such other procedures as the mediator may recommend.
- 47.6 If the Parties reach agreement on the resolution of the Dispute, such agreement shall be recorded in writing and once signed by the Parties' authorised representatives, shall be final and binding on the Parties.

- 47.7 If either Party refuses at any time to participate in the mediation procedure and in any event if the Parties fail to reach agreement on the Dispute within 40 Business Days of the service of the Notice either Party may commence proceedings in accordance with Clause 46.
- 47.8 For the avoidance of doubt, the Contractor shall continue to perform its obligations in accordance with this Contract and without delay or disruption while the Dispute is being resolved pursuant to this Clause 47.
- 47.9 Neither Party shall be prevented from, or delayed in:
- 47.9.1 seeking any order for specific performance or for interim or final injunctive relief as a result of the provisions of this Clause 47 and Clause 47 shall not apply in respect of any circumstances where such remedies are sought; or
- 47.9.2 exercising its rights under Clause 33 as a result of the provisions of this Clause 47.

48. **COUNTERPARTS**

This Contract may be executed in any number of counterparts or duplicates, each of which shall be an original, and such counterparts or duplicates shall together constitute one and the same agreement.

IN WITNESS whereof this Contract has been duly executed as a deed by the Parties and delivered on the date of this Contract

EXECUTED as a deed by affixing)
the common seal of)
LONDON BUS SERVICES LIMITED)
in the presence of:)

Authorised Signatory

EXECUTED as a deed by affixing)
the common seal of)
WRIGHTBUS LIMITED)
in the presence of:)

Authorised Signatory

SCHEDULE 1
SPECIFICATION FOR DOUBLE DECKER BUS VEHICLES

Part 1 - Technical Specification

<i>Ref.</i>	<i>SECTION</i>	<i>DESCRIPTION OR PERFORMANCE REQUIREMENTS</i>
a	b	c
1.00	Scope	
1.01	General	<p>The New Bus for London is a priority project for the Mayor of London. The overall guiding requirements for the Vehicle are as follows:</p> <ul style="list-style-type: none"> • the Vehicle shall have an iconic design and have a unique look and feel; • the fuel economy performance shall be at least as good as that demonstrated by the best-of-breed hybrid systems currently being developed (2009); • there shall be an open platform; • the open platform shall be capable of being closed off; • the Vehicle shall be configurable to operate in one-person and two-person crew modes; • the Vehicle shall have two staircases. <p>A Prototype Vehicle shall be delivered and put into trial running in 2011, and an initial batch of five Production Vehicles shall be delivered and in operation before the end of April 2012. The specification for any subsequent orders for Production Vehicles shall continue to adhere to the requirements of this Technical Specification.</p>
1.02	Design and manufacturing expectations	<p>The Contractor shall prioritise weight reduction measures and techniques throughout the design and manufacturing process in order to maximise fuel economy performance and minimise emissions and environmental impact.</p> <p>The Contractor shall utilise innovations in materials, systems and processes throughout the design and manufacturing processes, and be expected to redeploy these across its product ranges. This, however, shall not preclude the use wherever practicable of standard and commonly sourced functional components and sub-assemblies where appropriate.</p> <p>The Contractor shall employ quality management systems to ensure the highest levels of quality assurance are achieved.</p> <p>The Contractor shall design and construct the Vehicle to be compliant with the legislative requirements</p>

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
		for construction, sustainability and disposal, to be fit for purpose and be economic in its cost to operate. The Vehicle shall achieve a minimum operational life of 14 years.
1.03	Operational duties	<p>The Vehicle shall be suitable for large city operation and incorporate the specific requirements of central London operation. The Vehicle shall be capable of high frequency, long running, fully passenger laden PSV operational schedules, undertaken in adverse traffic conditions (e.g. slow moving, frequent start-stop).</p> <p>The Vehicle will be expected to operate continuously for at least 18 hours per day without returning to its depot for refuelling or servicing, covering a minimum average of 250km during that duty cycle with an average operational speed of between 10-20kmh, for 7 days per week and for 364 days per year. The maximum expected operational life of the Vehicle under the Company's duties is 14 years.</p>
1.04	Whole life cost	<p>The Contractor shall provide a whole life cost schedule for the Vehicle based on a range of factors including but not limited to:</p> <ul style="list-style-type: none"> • the unit cost of the Vehicle; • the residual value of the Vehicle; • the maximum operational duties described in Specification 1.03 (including fuel, oils and usage of other consumables); • the maximum operational life for the Company as described in Specification 1.02; • the proposed cost of the maintenance regime (including planned preventative and corrective work, replacement parts, routine servicing and cleaning, periodic deep cleaning etc.); • refurbishment cycles (see Specification 20.03); • typical accident damage repairs. <p>The whole life cost shall exclude tyre, driver and crew costs. The whole life costs shall be considered in two stages for both (1) an initial 7 year period based on the manufacturer's repair & maintenance programme given in Schedule 14 (one route contract term), and (2) a second 7 year period (reflecting a maximum 14 year life), and shall be incorporated in the relevant tables in Schedule 4.</p>

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
1.05	Crew	The Vehicle shall be capable of operation both with one crew member (i.e. driver) and with two crew members (i.e. driver plus second crew member).
1.06	Ticketing regime	The standard Transport for London (TfL) ticketing and fare validation regime shall be deployed. Three remote Oyster card validators are to be provided in addition to the driver's ticket machine. Remote validators are to be positioned at the foot of both staircases and at the rear partition of the centre door. Final positions subject to approval.(see Specification 15.01).
2.00	Styling	
2.01	Styling	<p>The Vehicle shall have unique and iconic styling both externally and internally. There shall be an overall common styling theme that pervades all key features of the Vehicle.</p> <p>The Contractor shall provide details of partnerships or engagements with specialist vehicle styling consultants, or state if none are being considered.</p> <p>The final proposal for the essential "look and feel" of the Vehicle will be completed and approved in accordance with Schedule 2.</p>
2.02	Design material	The Contractor has been provided royalty free (for the purposes of the Contract only) with all of the winning design submissions that were part of the Company's Design Competition run in 2008. The Contractor is encouraged to fully utilise this resource in its proposals, and this data forms part of the Company's "Background Intellectual Property" for the purposes of the Contract.
3.00	Environmental	

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS															
3.01	Sustainability plan	The Contractor shall have and implement a sustainability plan that demonstrates how it will reduce the adverse environmental impact over the life-cycle of the Vehicles. CO2 emissions, air quality, water consumption and waste should be considered and minimised during the manufacturing, use and disposal of the Vehicles. The Contractor shall comply with the End of Life Vehicle (ELV) Directive and, in addition, achieve recycling rates of 95% of the Vehicle weight.															
3.02	Emissions	<p>The Vehicle shall have emissions which are significantly lower than an equivalent conventional diesel engined bus, demonstrated over Transport for London's standard test cycle (also known as the TfL MLTB drive cycle). Details of the test cycle are available on request.</p> <p>The Contractor shall ensure that it achieves or improves on the stated target emissions for the proposed Vehicle, which are as follows:</p> <table border="0"> <tr> <td>HC</td> <td>(g/km)</td> <td>0.015</td> </tr> <tr> <td>CO</td> <td>(g/km)</td> <td>0.110</td> </tr> <tr> <td>NOx</td> <td>(g/km)</td> <td>5.000</td> </tr> <tr> <td>PM</td> <td>(g/km)</td> <td>0.030 (range of ultrafines to be balanced)</td> </tr> <tr> <td>CO2</td> <td>(g/km)</td> <td>750</td> </tr> </table> <p>The Emissions Test Process is given in Schedule 1 Part 2 with amendments for Hybrid bus testing – Diesel Bus Emission Test Process and Hybrid Bus Emissions Test Process respectively (Appendices 1 & 2)</p>	HC	(g/km)	0.015	CO	(g/km)	0.110	NOx	(g/km)	5.000	PM	(g/km)	0.030 (range of ultrafines to be balanced)	CO2	(g/km)	750
HC	(g/km)	0.015															
CO	(g/km)	0.110															
NOx	(g/km)	5.000															
PM	(g/km)	0.030 (range of ultrafines to be balanced)															
CO2	(g/km)	750															
3.03	Noise	<p>The Vehicle shall have a drive-by test result of 77dB(A).</p> <p>A supplementary TfL drive-by test which includes acceleration conditions and ancillary equipment to be operating shall also be undertaken. This test has a range of targets for both interior and exterior noise. The Contractor will be required to quantify its results utilising the current TfL test procedures. Details of these tests are available on request.</p>															

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
		<p>Noise testing procedures are given in Schedule 1 Part 2 – Noise Test Process and Standards.(Appendix 3)</p> <p>Noise frequency from any equipment shall avoid low frequency bands in the range that can cause disturbance to some passengers and other nearby members of the public who have a particular sensitivity to these frequencies.</p>
4.00	Accessibility	
4.01	General	Accessibility levels must meet or exceed minimum requirements of the Public Service Vehicles Accessibility Regulations 2000 (PSVAR) and Disability Discrimination Act 2005 (DDA), and other relevant legislative requirements. Layouts and features must be extensively trialled, tested and demonstrated to the Company and with representatives of key user groups as part of the Quality Plan (see Specification 21.02).
4.02	Wheelchair space	<p>One wheelchair space of minimum length 1535mm shall be provided as near as practicable to the central entrance on the offside of the Vehicle. The space shall be configured so that it can also be used by buggies if not occupied by a wheelchair.</p> <p>The designated wheelchair bay floor area is to be surrounded by a white border on all sides, a white wheelchair logo is to be set into this area to the dimensions and position shown in Schedule 1 Part 2 – Wheelchair Floor Logo and Layout (Appendix 7). The remainder of the wheelchair bay floor is to be finished in the standard floor covering and colour.</p> <p>The final proposed layout will be subject to approval by the Company.</p>
4.03	Wheelchair ramp	<p>The Vehicles shall be fitted with a powered driver-operated wheelchair access ramp at the centre door. The ramp must be installed with the manoeuvring area monitored by close circuit television displayed on the driver's compartment monitor when doors are open.</p> <ul style="list-style-type: none"> The ramp must be designed to maximise the protection of the ramp from damage and specific

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
		<p>attention should be given to its installation to improve operational reliability.</p> <ul style="list-style-type: none"> • The Vehicle must be fitted with ramp deployment audible warning device at the centre doors, with a beeping sound and not to exceed 75db(A), when measured at 1.25m height from the exterior ground on centre line of the exit door at a distance of 1.5m. • Access ramps must function on all kerb surfaces likely to be encountered on London streets. • The ramp forward edge is to be recessed at the centre door from the main bodywork exterior by at least 35mm. The area between the lower edge of the closed door leaf and the floor should be protected against water or any other form of material ingress.
4.04	Induction loops	Induction loops (T band) must be provided to interface with the PA and iBus systems.
4.05	Colour contrasts	The Vehicle shall be designed with colour contrasts that comply with the relevant legislative requirements for handrails, glazing manifestations, step thresholds and other features. The final proposed arrangements will be subject to approval by the Company.
4.06	Other provisions	Step heights and thresholds shall be compliant with the relevant legislative requirements.
5.00	Dimensions	
5.01	Primary dimensions	<p>The Vehicle shall have:</p> <p>Maximum overall length of 11,232mm.</p> <p>Minimum length:10,000mm.</p> <p>Height: maximum permitted height for operational duties in London, currently 4.438m.</p> <p>Height: the minimum height will be derived from the internal headroom requirements given in Specification 5.02.</p>

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
5.02	Other dimensions	<p>Height: minimum 1,800mm internal headroom to be achieved on each deck. Maximum height to be provided at entrances and at open platform. A low-bridge design is not required.</p> <p>Only one wheelbase option is to be submitted for evaluation in the approval stage. This will be the Contractor's preferred option for adherence to dimensional and capacity requirements.</p> <p>The Vehicle shall be designed with approach and departure angles of between 7 and 8 degrees. The design shall state what angles will be achieved with DDA compliant step heights.</p>
5.03	Turning circle/swept path	The turning circle shall be no worse than the current worse case London specification double-deck. The Contractor shall provide drawings showing the proposed swept path of the Vehicle.
6.00	Interior	
6.01	Passenger capacity	<p>The total overall passenger capacity (including standees) shall be a minimum of 87. Passenger weight shall be based on 68kg per person.</p> <p>The Contractor shall confirm the minimum overall capacity target which shall apply to all Vehicles and which shall be no less than 87 as set out above.</p>
6.02	Seated capacity	<p>The seating capacity is to be:</p> <p>Lower saloon - 22 seats</p> <p>Upper saloon - 40 seats.</p>
6.03	Standing capacity	<p>Standees shall only be accommodated in the lower saloon: a minimum of 25 standees shall be accommodated.</p> <p>The immediate area of the open platform shall not be included in the space available for standees.</p>

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
6.04	Seating	<p>The seating shall be a modern version of a bench seat to TfL's bespoke design for NBfL.</p> <p>The Contractor shall maximise the number of forward facing seats. There shall be no tip-up seats provided.</p> <p>Minimum width 440mm (measured on cushion).</p> <p>Minimum pitch at 750mm wherever possible.</p> <p>The use of inward facing seats to maximise seating capacity in the lower deck is acceptable.</p> <p>The final approved height of the seat cushion shall be subject to a review of user acceptance trails.</p> <p>The final layouts shall be subject to a specific approval by the Company, including a review of the horizontal seating alignment.</p> <p>Inward facing seats may also be considered if they enhance the layout of the rear platform area. The provision of seat perches is acceptable in addition to minimum numbers of full seats provided.</p>
6.05	Priority seats	<p>The Vehicle shall be designed with a minimum of 4 Priority Seats, which shall be provided on the low flat level floor area. In addition, a further 4 seats to a similar standard, designated "preferential seating", shall be provided in this area.</p>
6.06	Low flat near-level floor	<p>The Vehicle shall be designed to have a low flat near-level floor throughout in the lower saloon for all passenger movement areas and the floor space shall be optimised subject to minimum required space for electrical and mechanical equipment compartments.</p> <p>A minimum number of 8 seats to be provided in this area.</p> <p>Maximum transverse (i.e. cross Vehicle) slopes to be compliant with requirements of DDA. Maximum longitudinal slopes to be stated and justified.</p>
6.07	Lighting	<p>The Vehicle shall be provided with interior lighting using LED lamps or equivalent low energy equipment that provides a high quality ambience in the passenger saloons using a mix of direct and indirect lighting techniques, with enhanced illumination for specific passenger movement and</p>

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
		<p>circulation areas.</p> <p>Interior saloon lighting to provide at minimum:</p> <ul style="list-style-type: none"> • Seats: 150mm above cushion level 150 lux • Aisles: Floor level, on bus centreline adjacent to all seats 150 lux • Steps: Floor level, centre of entrance and exit steps 100lux • Double deck stairs: Floor level, centre of every tread 100 lux <p>Lighting levels will be subject to test and approval by the Company.</p> <p>The Vehicle shall be provided with smart sensors to ensure the interior lighting is automatically deactivated in daylight.</p>
6.08	Handrails	<p>Handrails and handpoles are to be fitted in accordance with ECE Regulation 107.2, the following further provisions apply:</p> <p>(a) All handrails and stanchions to be 35mm diameter smooth tube with powder coating or nylon dipped matt crackle finish.</p> <p>(b) Low level hand poles integrated into seat structure to be provided on lower deck.</p> <p>(c) Door or door partition handrails positioned to assist boarding and alighting must be fitted at all entrance and exit points.</p> <p>(d) Seat-back to ceiling handrails (with bell push) are required at all forward facing seats on lower saloon and alternate seats on upper saloon.</p> <p>(e) All bell push buttons to be coloured red with contrasting surrounds.</p> <p>(f) Where horizontal hand rails are fitted in standing areas, bell pushes must be placed in a position so as to limit the risk of accidental activation by passengers leaning on them.</p> <p>(g) A floor to ceiling hand pole is required in the open rear platform area. In addition, handrails shall be provided on the interior bulkhead and interior of the rear bodywork of the open platform area to assist boarding and lighting. The handrails and pole shall not be visible or useable from the exterior when the rear platform is closed off (see Specification 9.00).</p>

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
		<p>(h) At facing seats vertical handrails are to be fitted to window pillars to facilitate movement in and out of the seating.</p> <p>(i) In addition to the front staircase outer handrail, a horizontal section of handrail shall be incorporated to the offside in an agreed position to provide additional support for users.</p>
6.09	Public address equipment	To provided as part of the iBus equipment. See Specification 16.01.
6.10	Interior noise levels - general	The Vehicle shall be designed to provide a comfortable passenger experience and special attention shall be given to ensuring the passenger compartments are as quiet as practicable. Body panels and interior fittings shall be secured so as not to produce rattles or other noise emissions across all harmonics.

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS																		
6.11	Interior noise performance targets	<p>The maximum interior noise levels generated by the Vehicle shall not exceed the following:</p> <ul style="list-style-type: none"> • When driving at constant 16 kph for 2 minutes on straight road (all auxiliaries running at maximum) • Measured at 1m height, on centreline of Vehicle on front axle and rear axle datum, no more than shown <table border="0" data-bbox="672 542 1344 702"> <tr> <td></td> <td style="text-align: center;">Lower Saloon</td> <td style="text-align: center;">Upper Saloon</td> </tr> <tr> <td style="padding-left: 20px;">Front Axle</td> <td style="text-align: center;">64dB(A)</td> <td style="text-align: center;">57 dB(A)</td> </tr> <tr> <td style="padding-left: 20px;">Rear Axle</td> <td style="text-align: center;">68 dB(A)</td> <td style="text-align: center;">59 dB(A)</td> </tr> </table> <ul style="list-style-type: none"> • When driving at constant 40 kph for 2 minutes on straight road (all auxiliaries running at maximum) • Measured at 1m height, on centreline of Vehicle on front axle and rear axle datum, no more than shown <table border="0" data-bbox="672 909 1344 1069"> <tr> <td></td> <td style="text-align: center;">Lower Saloon</td> <td style="text-align: center;">Upper Saloon</td> </tr> <tr> <td style="padding-left: 20px;">Front Axle</td> <td style="text-align: center;">68 dB(A)</td> <td style="text-align: center;">60 dB(A)</td> </tr> <tr> <td style="padding-left: 20px;">Rear Axle</td> <td style="text-align: center;">70 dB(A)</td> <td style="text-align: center;">60 dB(A)</td> </tr> </table> <p>The testing method and standards are given in Schedule 1 Part 2 – Noise Test Process and Standards (Appendix 3).</p>		Lower Saloon	Upper Saloon	Front Axle	64dB(A)	57 dB(A)	Rear Axle	68 dB(A)	59 dB(A)		Lower Saloon	Upper Saloon	Front Axle	68 dB(A)	60 dB(A)	Rear Axle	70 dB(A)	60 dB(A)
	Lower Saloon	Upper Saloon																		
Front Axle	64dB(A)	57 dB(A)																		
Rear Axle	68 dB(A)	59 dB(A)																		
	Lower Saloon	Upper Saloon																		
Front Axle	68 dB(A)	60 dB(A)																		
Rear Axle	70 dB(A)	60 dB(A)																		
7.00	Mechanical,engine systems, drive train																			

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
7.01	Fuel economy	<p>The Vehicle shall achieve a minimum diesel equivalent economy of 28.6 litres/100 km (when using EN590 diesel) when measured against the TfL MLTB test cycle. Details of the test cycle are available on request. Endurance and range shall be compatible with the operational duty cycles described in Specification 1.03.</p> <p>The measurement of Fuel Economy is given in Schedule 1 Part 2 – Diesel Bus Emission Test Process and Hybrid Bus Emissions Test Process respectively (Appendices 1 & 2).</p>
7.02	Performance profile	<p>The combined engine and transmission acceleration controls should limit the bus to a rate that delivers an acceptable LBSL emissions performance and provides the driver with adequate driving acceleration in the fully laden condition, whilst not subjecting the passengers to excessive forces that potentially cause the passengers to become unstable.</p> <p>The maximum rate of acceleration should be between 1.0 and 1.2m/s² under all load conditions.</p> <p>Driver performance management systems and automatic engine start-stop or engine shutdown on idle systems are encouraged.</p> <p>The Contractor should include for any engine/control system based fuel economy techniques.</p> <p>Proprietary driver performance management systems as may be specified additionally by Vehicle Operators and any provision necessary to accommodate them, will be at the Vehicle Operator's expense and should not be costed into the prices in Schedule 4.</p>
7.03	<i>Engine</i>	<i>DELETED</i>
7.04	Transmission	The Vehicle shall be designed with a transmission system that delivers a very smooth power delivery, such that any changes in gearing are virtually imperceptible by customers.

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
7.05	Suspension	The suspension system shall deliver a high quality ride, equivalent to that achieved by a 4 or 6 airbag-type system. Kneeling and full squat suspension shall be provided for a maximum first step height at all passenger entrances/exits at least as low as required by the relevant Vehicle regulations and standards.
7.06	Electrical system	Ancillary electrical systems shall be adequate for all lighting, iBus, ticketing equipment and other passenger systems requirements.
7.07	Fuelling system/capacity	The fuel tank (or energy storage) capacity shall be sufficient to meet the operational requirements given in Specification 1.03 plus a minimum of 10%. Options for the re-fuelling system will be allowed as required by Vehicle Operators. The Contractor shall provide for a standard fuelling option. Options for other fuelling systems will be at the Vehicle Operator's expense.
8.00	Entrances	
8.01	Minimum requirements	The Vehicle shall be designed with three passenger entrances. The front and centre service doors must be double door width, meeting the dimensional requirements prescribed in ECE regulation 107.2 (1100mm minimum).

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
		<p>The service door built into the rear platform's closure arrangement shall provide for a clear door width of 550mm.</p> <p>Front entrance to be powered inward glider type, flush fitting when closed and one piece full depth glass in each door leaf for maximum driver view of kerb side.</p> <p>Centre entrance to be powered outward slider type and flush fitting to the body side when closed. Door header panels must provide adequate prevention against finger ingress to the door operation mechanism.</p> <p>Door or door partition handrails positioned to assist boarding and alighting must be fitted at all entrance and exit points.</p> <p>The emergency door controls fitted to entrance and exit doors must be disabled automatically by way of an interlock, when the Vehicle is travelling at speeds above 5kph.</p> <p>Overhead suitable illumination, on doors opening must be provided at minimum Lux levels as stated in Specification 6.07.</p> <p>Door closing-only audible warning device on all exit doors, to be of beeping sound and not to exceed 75dB(A), when measured at 1m height from floor on centre line of Vehicle and exit door.</p> <ul style="list-style-type: none"> • Broad band noise type will also be considered. • Voice or other tones are not acceptable.
8.02	Emergency exits	Emergency exits shall be provided to meet requirements of the applicable EC Directive, regulations and certification.
9.00	Open Platform	

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
9.01	Open platform	<p>Stowable bodywork with door: A rear open platform in the rear nearside corner with stowable bodywork which is capable of closing off the platform so it can no longer be used as an open platform. The stowable bodywork shall include within it an opening section which shall function as a power-operated service door. (For door width see Specification 8.01).</p> <p>The operation to open or close off the open platform shall be capable of being undertaken within 5 minutes or less. Interlock buttons must be provided such that the changeover between operating modes is only capable of being carried out with both crew members present and at their respective work stations. The signal to allow initiation of the changeover must be made by the driver. The crew member must acknowledge this signal releasing the locking mechanism on the stowable rear door. The arrangement must prevent the stowable part of the rear door being opened or closed when the 2nd crew member is not present. The control buttons for the crew member must be discretely positioned at the work station.</p> <p>No special tools should be necessary for this operation, which must also be capable of being undertaken away from the garage or depot. The stowable bodywork shall be capable of remaining open (i.e. stowed) whilst the Vehicle is in motion. No emergency release required.</p> <p>It is imperative that the design and construction of the rear platform door and in particular the stowable bodywork is robust and resistant to minor damage that could affect its reliability.</p> <p>The Contractor must comply with the relevant legislative requirements, certification and operational requirements.</p> <p>A permanently open platform is not acceptable.</p> <p>When in the open configuration, the open platform could include part of the rear face of the Vehicle extending round from the rear near side corner.</p>

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
9.02	Additional safety features	<p>The 2nd crew member is to be provided with a signal button interlocked to the door brake system. When in open platform mode the 2nd crew member will be required to press and hold the button indicating that the rear platform is clear. This signal will work in conjunction with the door closed signals from the front and centre doors only allowing the bus to move away once all three signals are given. The 2nd crew member signal must be held until the bus starts to move. Door condition will be shown on the driver's display. The button will be positioned discretely at the rear crew place.</p> <p>The Contractor shall include its preferred provisions and arrangements together with a justification of the benefits for approval by the Company.</p>
10.00	Staircase	
10.01	Number of staircases	The Vehicle shall be designed with two staircases.
10.02	Orientation of staircase	<p>Rearward or forward ascending staircases (including a turning staircase) will be considered by the Company.</p> <p>If a turning staircase is to be proposed due consideration must be given to step heights and depths especially on the inner edge of any turning steps. Adequate landing and "passing" space should be provided.</p>
11.00	Body structure	

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
11.01	Driver's cab	<p>The Vehicle shall be designed so that the driver's cab is not completely separated from the passenger saloon. Driver/passenger interaction must be possible when the Vehicle is operating in one-person mode. For other features, see Specification 12.00.</p> <p>The ergonomics of the cab layout shall be developed during the detailed design stage and in collaboration with representatives of the Vehicle Operators (see Specification 12.00).</p> <p>It is not envisaged that there will be any Vehicle Operator customisation or options.</p>
11.02	2 nd crew accommodation	<p>Within the rear open platform area, provision must be made for the 2nd crew member to stand to supervise boarding and alighting without obstructing the passenger flow. No seat is required although a secure locker facility shall be provided. The Contractor shall provide appropriate accommodation which allows the 2nd crew member to undertake their primary role of supervising the boarding and alighting of passengers and to consider appropriate normal and emergency communication system (including provision of a 2nd crew member's panic alarm) between the 2nd crew member and the driver.</p> <p>A separate signal button is to be provided at the 2nd crew place to allow the crew member to alert the driver to an incident, hazard or emergency. The button is to be discretely positioned at the crew place and disabled when in 3 door mode.</p>

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
11.03	Glazing and windows	<p>The Vehicle shall be designed with bonded glazing, with sacrificial film or appropriate anti-scratch/anti-graffiti window protection.</p> <p>Tinted side windows of at least 4mm are required achieving:</p> <ul style="list-style-type: none"> • Solar energy transmittance of not more than 65%; • Light transmittance of not more than 80%. <p>Hopper windows for ventilation are not mandatory. Adequate ventilation and airflow must be provided and demonstrated by the ventilation and cooling system (see Specification 13.00).</p>
11.04	Insulation	<p>Full bodywork insulation to sides, roof, front and rear where feasible is required to improve heat retention in winter and solar reflection in summer.</p> <p>The floor and supporting bulkheads between the engine and passenger area are to be well insulated against noise and heat intrusion.</p> <p>Insulation is to be provided against noise ingress, covering the total area from a point forward of the rear axle extending to the engine bulkhead insulation.</p>
12.00	Driver's cab interior layout and features	
12.01	Functional requirements	<p>The driver's cab shall provide a safe and comfortable workplace to enable the driver to operate the Vehicle. This includes all driving duties and passenger interaction functions in both one- and two-person crewed modes.</p> <p>Ticketing, fare validation and cash collection facilities shall be provided.</p> <p>Access to driver's cab shall be from within the lower saloon.</p>

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
		<p>Consultation will be required with representatives of the Vehicle Operators on the final cab layout.</p> <p>There will be no Vehicle Operator options or customisation of the cab layout.</p>
12.02	Layout	The layout shall integrate all the necessary equipment into the cab dashboard and interior bodywork including the iBus equipment ticket and fare validation equipment and CCTV screen(s). The Contractor shall validate the ergonomic of the layout in consultation with representatives of the Vehicle Operators.
12.03	Instrumentation	<p>The Vehicle shall be provided with the necessary instrumentation and control equipment as required to operate, monitor and manage the Vehicle systems.</p> <p>Nearside mirror(s) to be designed to support observation of the rear open platform.</p>
12.04	Equipment	<p>The driver's cab shall be provided with the following equipment:</p> <p>(a) A cab air conditioning system which can be manually controlled by the driver;</p> <p>(b) Driver's anti-vandal screen is to be provided utilising a Polycarbonate "Marguard" type material. The screen should be suitably mounted to fully protect the driver from assault with particular attention given to the door security and area between door to front screen. The screen must be rattle proof and must not cause any interference with or distraction to the driver's duties;</p> <p>(c) Driver must be further protected by an independent "siren / common network fleet sound" assault alarm also activating the Vehicle hazard lights;</p> <p>(d) Driver operated PA system, "for passenger communication" will be provided as part of the iBus system (see Specification 16.01);</p> <p>(e) The driver's seat shall be fully fit for purpose. The final choice of seat may be subject to Vehicle Operator preferences. The Contractor shall quote only for a standard seat. Alternatives to this will be at the Vehicle Operator's expense;</p> <p>(f) Ticketing, fare validation and cash collection equipment shall be installed.</p>

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
12.05	Cab/Signal Window	A sliding driver's signalling window shall be provided on the offside. The window shall be constructed of suitable "Bandit glass" to provide protection to the driver from external attack.
13.00	Heating, ventilation, cooling	
13.01	Heating, ventilation and cooling - general	<p>The Vehicle shall include fully automatic heating, ventilation and cooling system which provides a comfortable ambient temperature for passengers in summer and winter conditions. The operating targets are set out below in Specification 13.02.</p> <p>The performance shall be based on a closed open platform configuration and the Contractor will address how systems should adjust to cope during open platform operation.</p>
13.02	Heating, ventilation and cooling - performance	<p>The performance of the heating, cooling and ventilation system will be as follows:</p> <p><u>Heating system on/off settings:</u> On $\leq 15^{\circ}\text{C}$, thermostat on gradual shut down within $-ve 4^{\circ}\text{C}$. Off $\geq 15^{\circ}\text{C}$, thermostat fully shut down (no hot water flow).</p> <p><u>Ventilation system on/off settings:</u> On $> 17^{\circ}\text{C}$ via heating system blowers only running with ambient fresh air. Off $> 21^{\circ}\text{C}$ with nominal air flow maintained to support forced air ventilation or air cooling.</p> <p>Adequate fresh air intakes shall be provided.</p> <p>Where proposals do not include hopper windows adequate arrangements must be provided for the intake and flow-through of fresh air. The method must be fully integrated with the heating and air cooling systems. The method of achieving this must be agreed with the Company.</p> <p><u>Air Cooling (Upper Deck Only)</u> Off $< 21^{\circ}\text{C}$</p>

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
		<p>On >21°C gradual build up to a maximum capacity at 26°C Upper saloon air cooling system shall be able to reduce the internal temperature by 5°C when subject to an interior temperature of 28°C over a 30 minute pull down test.</p> <p>The upper deck air cooling will function independently of the driver's cab air conditioning.</p> <p>The system is subject to performance approval testing, a copy of the test requirements is available on request.</p> <p>Blown air ducted heating and ventilation system to both lower and upper deck. The ducting should provide a good and even circulation of air throughout the length of the Vehicle interior.</p> <p>Convection only systems are not acceptable.</p> <p>Fully automatic thermostatic control of the system is required. The thermostatic sensors should be positioned to reflect the interior, upper and/or lower deck temperature of the Vehicle and be in a tamper proof location.</p> <p>Heated or unheated fresh / exterior air should be circulated throughout the Vehicle dependant on interior Vehicle temperature.</p> <p>It shall not be necessary for the driver, maintenance teams or any other parties to adjust or set the system during variations of temperature over the summer and winter periods.</p> <p>If engine bay "maintenance only" shut-off valves are required, they must utilise an independent hand tool and not be capable of being adjusted by lever or hand operation.</p> <p>The temperature requirements for the heating and cooling systems and the Upper Deck Cooling validation test are given in Schedule 1 Part 2 – Heating and Ventilation System Operational Settings and Test Process (Appendix 5).</p>

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
14.00	Passenger information systems	
14.01	iBus	<p>The Contractor shall fit the Company's proprietary iBus information system. This equipment will be supplied free of charge.</p> <p>Three iBus display screens are to be provided, one at the front of the upper deck, one on the rear face of the front staircase and one facing forward at the nearside rear.</p> <p>Enhanced information systems or equipment may be proposed.</p> <p>Details of the technical specification of the iBus equipment are available on request.</p>
15.00	Ticketing systems	
15.01	Ticketing systems	<p>The Contractor shall fit the Company's ticketing and fare validation equipment. This equipment will be provided free of charge.</p>
16.00	Communications, cctv	
16.01	Communications	<p>The Vehicle shall be provided with a passenger announcement communication system operated by the driver. This equipment will be part of the iBus equipment provided free of charge.</p> <p>Cabling is to be provided to the 2nd crew member's locker at the rear platform to allow for future upgrade to a second PA microphone.</p> <p>The Vehicle shall be provided with PA speakers for the announcement system which shall be discretely integrated into the interior bodywork, but which shall be designed to be easily maintained or</p>

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
		<p>replaced.</p> <p>The communication system shall also enable the driver to communicate with the Company's operations control centre.</p> <p>The vehicle shall be provided with a hazard warning signal to the driver, operated from a discrete button at the rear platform.</p>
16.02	CCTV recording equipment	<p>The vehicle shall incorporate the provision for CCTV recording equipment to the standard of functionality, performance and facility given in Schedule 1 Part 2 – CCTV System Requirements and Specification (Appendix 9). Note that the functionality detailed in Appendix 9 is in line with current developments within the industry. The capability of DVR devices continues to evolve and the equipment specification is subject to continued review.</p> <p>Recognising that the supplier of this equipment will be a Vehicle Operator preference, the Contractor shall not include for the cost of providing CCTV recording equipment. However, provision for installation of the standard system must be included.</p>
16.03	CCTV camera equipment	<p>Provision for the installation of cameras shall be included, the choice of equipment supply will be at the Operators discretion and its cost should not be included in the price contained in Schedule 4. Camera equipment must provide as a minimum the performance standards given in Schedule 1 Part 2 – CCTV System Requirements and Specification (Appendix 9).</p> <p>The Vehicle shall incorporate the following CCTV capture equipment:</p> <p><u>Digital Colour Cameras</u></p> <ul style="list-style-type: none"> • Combination of wide and standard angle lenses to improve vision coverage. • Housed in vandal resistant dome or concealed.

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
		<ul style="list-style-type: none"> • Housings shall be fully integrated into interior bodywork. • Camera coverage and positions shall be suitable to monitor the following areas: <ul style="list-style-type: none"> a. Forward view of the road b. Cab view from centreline to offside c. Front entrance area from driver's cab partition d. Wheelchair bay looking forward e. Centre door including deployed wheelchair ramp f. Lower saloon looking rearwards g. Rear platform h. Upper deck periscope view i. Front staircase downward view j. Mid upper saloon looking rearwards k. Rear staircase downward view l. NS and OS flank looking rearwards m. Rear view of road n. Upper saloon rear seat and forward view of saloon <p>The final position of cameras is subject to approval.</p>

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
16.04	CCTV monitoring equipment in driver's cab	<p>Provision for the installation of the driver's CCTV monitors shall be included, the choice of equipment supply will be at the Operators discretion and its cost should not be included in the price contained in Schedule 4.</p> <p>The Vehicle shall incorporate the following CCTV monitoring equipment in the driver's cab: Twin TFT LCD monitors</p> <ul style="list-style-type: none"> i) Suitably mounted in drivers cab area; ii) Monitor to display radio-adjusted time clock; <p>Note: the detailed requirements of the CCTV capture, monitoring and recording systems are subject to review. The Company shall confirm its final requirements to the Contractor.</p>
16.05	CCTV monitoring equipment in passenger saloon	<p>Provision for the installation of CCTV monitors shall be included, the choice of equipment supply will be at the Operators discretion and its cost should not be included in the price contained in Schedule 4.</p> <p>The Vehicle shall be provided with the following CCTV monitoring equipment in the passenger saloon:</p> <ul style="list-style-type: none"> • Two colour TFT LCD 10" flat panel monitors mounted: <ul style="list-style-type: none"> ○ One in the opening door panel of the front staircase ○ One in the door of the 2nd crew member's locker ○ The installation must be secure, prevent tampering and protect cabling from damage. • Monitor to display radio-adjusted time clock; • Monitor to display continuously a 5 second sequence of all individual interior cameras and end with an all camera view. <p>Note: the detailed requirements of the CCTV capture, monitoring and recording systems are subject to review. The Company shall confirm its final requirements to the Contractor.</p>
17.00	Destination equipment	

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
17.01	Destination displays	<p>The Contractor shall provide route and destination equipment as described below. Route number and destination wording and information relevant to particular routes will be provided in due course during the production phase:</p> <ul style="list-style-type: none"> • Power operated front, side, and rear displays with route selection unit in drivers cab simultaneously controlling all displays. • All displays in Transport for London's Classic Johnston bold font. • All displays in white font on black background including out of service or any other passenger information. • All displays to be suitably and fully back-illuminated using an LED-type lighting system, positioned at horizontal centreline of each blind. • No light illumination gaps should be visible around any point on the displays from the exterior view of the Vehicle. • Blind jockey rollers or other devices must be utilised when necessary to keep blinds tort and as close as possible to the glazing line. • All displays to have exterior anti vandal impact and anti reflection overlay. • Front destination identification to be viewable from the drivers cab. • Front route and ultimate destination only, to be side by side arrangement. Independent single track number to the near side. • Front route number to be no smaller than 450mm x 330mm. • Ultimate destination sight size of not less than 1160mm width and 330mm height. • Near-side route and ultimate destinations only, to be side by side arrangement. Route number to the forward most point of display. • Intermediate destination sight size of not less than 687mm width and 210mm height. • Route number to utilise full depth available from display height, sight size of not less than 270mm width and 210mm height. <p>Rear Route Number to be identical or no smaller than the independent front route number.</p> <p>Electronic displays are not acceptable. Options for destination blinds plus route number at front, rear, side and rear nearside corner may be proposed.</p>

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
18.00	Livery, colour schemes, trim, labels, notices, branding etc	
18.01	General	<p>The Vehicle shall have unique and iconic styling both externally and internally. There shall be an overall common styling theme that pervades all key features of the Vehicle.</p> <p>The Contractor has been provided royalty free (for the purposes of the Contract only) with all of the winning design submissions that were part of the Company's Design Competition run in 2008. The Contractor is encouraged to fully utilise this resource in its proposals, and this data forms part of Company's "Background Intellectual Property" for the purposes of the Contract.</p> <p>The final proposal for the essential "look and feel" of the Vehicle will be completed and approved in accordance with Schedule 2.</p>
18.02	External colour	<p>All Vehicles shall be painted in a livery that is fully London Buses red, reference ICI P498FPF3, or exact colour equivalent with the following exemptions:</p> <ul style="list-style-type: none"> • White roof panels. These must not be visible from pavement level. • Road wheels, hubs and front wheel nut guards are to be painted "Indian red".
18.03	Internal colours & trims	<p>Colours & trims to blend with overall styling and to be unique to this Vehicle.</p> <p>No Vehicle Operator options or customisation will be allowed.</p> <p>The final design for the proposed internal colours and trims will be submitted in accordance with Schedule 2.</p>
18.04	Seating moquette	<p>The Contractor shall design a new and unique seating moquette or seat covering material. No Vehicle Operator options or customisation will be allowed. The final design for the proposed seating moquette will be submitted in accordance with Schedule 2.</p>

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
18.05	Labels & notices	Statutory and general notices and labels to be provided in accordance with the certification requirements. Passenger notices and labels will be issued FOC (see Specification 28.00).
18.06	Branding	Please see Clause 28 for restrictions on the Contractor's branding. Vehicle Operator logos (vinyl overlays) will be allowed subject to approval by the Company.
18.07	Advertising	External and internal advertising space to be provided.
19.00	Safety features & requirements	
19.01	Safety - general	Over and above the Contractor's normal obligations with regard to health and safety matters, the Contractor shall investigate and propose a range of enhanced safety features for the operation of the Vehicle, and shall demonstrate these benefits by undertaking the necessary risk assessments.
19.02	Materials	Requirements for Fire Retardancy are given in Schedule 1 Part 2 – Materials Fire Retardancy Standards (Appendix 6).
19.03	Engine bay automatic fire suppression	The engine compartment shall incorporate a fully automatic fire suppression system, capable of extinguishing an engine bay fire before serious vehicle damage is sustained or passenger safety is compromised. The system should provide multi point dispensing, targeted at high-risk sections of the engine bay. Driver manual activation or override is not required. An audible warning on start-up shall be provided to alert the driver on the operational status of the system. Immediately prior to activation of the fire suppression system any fans in the protected engine bay area must be locked stationary and the engine shut down within 10 seconds. In addition, the fuel system to the engine bay must be cut off ensuring no further fuel is supplied to the engine bay area and an effective isolation of the fuel tank supply is achieved. Driver audible warning of this shut down procedure is required.

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
19.04	Smoke detectors	A concealed smoke detector shall be provided in the upper deck rear seated area. The detector shall be incorporated into the driver's audible information and warning device.
19.05	Emergency engine shutdown device	An engine emergency shut down device shall be fitted and it must be accessible without the need to open the main engine bay cover. It must also be of a type that allows the engine to be restarted from the driver's cab, provided the main rear engine bay cover is closed.
19.06	Wheel arch blow out liners	All wheel arches shall be fitted with tyre blow out protection liners.
19.07	Anti-slip floor covering	The Vehicle shall be provided with an anti-slip floor covering with joints minimised. Notwithstanding the requirements given in Specification 18.00 colour contrasting step nosing shall be used on all step edges in accordance with the PSVAR.
19.08	Crash and impact resistance	<p>The Contractor shall design the Vehicle with adequate crash and impact resistance and shall also design the Vehicle in such as way as to minimise the risk of serious injury to pedestrians in the event of a frontal collision.</p> <p>In particular the front near-side corner of the upper deck shall incorporate a discrete tree guard, giving additional forward protection to the front seated passengers, exterior dome and near side corner window-pillar.</p>
20.00	Repair and Maintenance	

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
20.01	General	<p>The Vehicle shall be designed to be easily maintained during both routine preventative and corrective maintenance cycles. In addition, due consideration must be given to facilitate accident damage and both major and minor repairs.</p> <p>The Vehicle shall be designed to have a very high operational availability taking into account the requirements of the maintenance regime. The Contractor shall state and justify a typical spare Vehicle requirement for a peak Vehicle requirement of 30 Vehicles (for a sample route).</p>
20.02	Cleaning	<p>The Vehicle shall be designed for ease and speed of internal and external cleaning, with special attention paid to choice of materials and surface textures, as well as avoiding dust, liquid and material traps within the saloons. The Vehicle must also be capable of using standard double-deck bus wash equipment.</p> <p>The cleaning regime is to be specified (e.g. effort and frequency required for in-service and deep clean cycles).</p> <p>Cleaning costs to be incorporated into the whole-life estimates given in Specification 1.04.</p>
20.03	Refurbishment	<p>The Contractor shall include for a full refurbishment programme after 5 years. The Contractor shall detail the major items considered necessary for refurbishment after 5 years of operation to facilitate a further 5 years of reliable operation.</p>
20.04	Maintenance.	<p>A full repair and maintenance programme including labour effort and parts shall be provided for years 1-7 for each Vehicle, and this shall be in accordance with Schedule 14. Costs for this repair and maintenance programme shall be incorporated in Schedule 4. In addition, realistic estimates shall be provided for non-routine maintenance costs, ad hoc costs and refurbishment and the costs of end of life conversion in years 8-14.</p>
21.00	Quality assurance	

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
21.01	Documents, drawings layouts	<p>1. Bidding stage: The Contractor shall provide sufficient general arrangement plans, drawings and technical documentation required to adequately describe the concepts and proposals being made. The Contractor shall provide computer generated imagery, visuals or renderings if requested by the Company.</p> <p>2. Design and development stages: General arrangements, plans, drawings and technical documentation are required at each milestone, as set out in Schedule 2.</p> <p>3. Production and delivery stages: Full production, tooling and assembly plans are required. A full suite of technical documentation is to be provided for each variant produced during the life of the production run. Two hard copies and one electronic copy to be provided for each document produced. Key assumptions and target outputs (e.g. weight, performance, economy, capacity, emissions etc.) to be produced for each of the steps identified in the design and development phase.</p>
21.02	Quality plan	A product quality assurance plan is required for the design and development stage, and production and delivery stage.
21.03	Stage approvals	<p>The Contractor shall propose key stages and milestones during the design and development stages which will require the Company's approval before authority is given to proceed to the next stage. This process will be agreed at Milestone 0 (zero)</p> <p>The milestone schedule is set out in Schedule 2.</p>
21.04	Vehicle manuals	Full Vehicle manuals (owner, driver, conductor, maintenance etc.) to accompany each Vehicle. Manuals must be provided in hard and electronic copy.

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
21.05	Training	The Contractor shall propose, develop and deliver appropriate training regimes for drivers, conductors and maintenance staff. Computer based training materials and methods may be proposed.
22.00	Pre-production vehicles	
22.01	Mock-up	<p>A full scale, full size static mock-up shall be constructed in 2 stages, which will be capable of being used for both stakeholder input plus passenger flow analysis. The mock-up shall include both the lower and upper deck and the interconnecting staircase(s). The mock-up shall be capable of being moved to one site within the Greater London area as specified by the Company for wider stakeholder engagement. The cost of movement assembly and dismantling is included within Schedule 4.</p> <p>Requirements for the 2 stage approach have been issued separately.</p> <p>Other partial mock-ups including virtual CGI visualisations and simulations may be proposed.</p>
22.02	Proving Vehicle	The Contractor shall construct at least one proving Vehicle for engineering test and endurance purposes. This Vehicle is not required to be tested or trialled in commercial service.
22.03	Prototype Vehicle	The requirements for production, testing and supply of a Prototype Vehicle are covered in Clause 5 of the Contract.
23.00	Testing	
23.01	Testing	The Prototype Vehicle shall be subjected to the full range of TfL and legal testing to ensure it complies with all TfL specifications and durability, and that all Vehicles (including pre-production and production Vehicles) will meet all legal and operational requirements.

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
24.00	Inspections	
24.01	Inspections	<p>A full inspection by any sub-suppliers necessary to enable guarantee provisions must take place with each Vehicle on completion.</p> <p>The following documentation shall be provided for each Vehicle:</p> <ul style="list-style-type: none"> • Unladen weight certificate is required for the groups of Vehicles, showing front axle, rear axle and total weights. • A laden weight calculation by axle and total is required for the group of Vehicles. • A Vehicle checklist and conformity inspection sign-off completed by the Company must take place with each Vehicle on completion. <p>All documentation must be signed, name / position printed, dated and Vehicle identified by registration number.</p> <p>Each Vehicle may be inspected at any time by the Company's nominated staff and signed as conforming to specification prior to delivery.</p> <p>Regular progress / quality meeting will be held and documented, at the request of either party, throughout the build process.</p>
25.00	Certifications	
25.01	Vehicle certification	The Contractor shall be responsible for certification of the Vehicle with the appropriate agency. This requirement is covered in the body of the Contract.
26.00	Manufacturer's warranties	

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
26.01	Manufacturer's warranties	<p>The following warranty periods are to be provided:</p> <p>Whole Vehicle - 2 years</p> <p>a) General Under Frame – 12 years</p> <p>b) Engine – 2 years plus options for 3 and 5 years</p> <p>c) Engine Auxiliary Components – 2 years</p> <p>d) Hybrid system major components (e.g. power storage system, generator motor, drive motor, power control systems) – 2 years plus options for 3 and 5 years</p> <p>e) Transmission – 2 years plus options for 3 and 5 years</p> <p>f) Full Drive Line – 2 years plus options for 3 and 5 years</p> <p>g) Under Frame Structural Integrity – 12 years</p> <p>h) Under Frame Corrosion – 6 years</p> <p>i) Body Frame Structural Integrity – 12 years</p> <p>j) Body Frame Corrosion – 6 years</p> <p>k) General Body Frame – 6 years</p> <p>l) Ramp Equipment – 5 years</p> <p>m) Interior Lighting – 5 years</p> <p>n) Floor Covering – 5 years</p> <p>o) Floor Boards – 5 years</p> <p>p) Door Systems – 5 years</p> <p>q) Destination Equipment – manufacturer specific</p> <p>r) Exterior Paint Colour Retention – 3 years (clear over base 5 years).</p>
27.00	Pre-delivery	
27.01	Valet	Every Vehicle shall undergo a full interior valet and external wash and polish prior to presentation for acceptance.

Ref.	SECTION	DESCRIPTION OR PERFORMANCE REQUIREMENTS
27.02	Factory acceptance	Factory acceptance is required by the Company for each Vehicle in accordance with the Contract.
27.03	Delivery	Delivery to a site specified by the Company within Greater London in accordance with the Contract.
28.00	Schedule of Free of Charge (FOC) items	
28.01	iBus	All equipment related to the iBus system. Note this does not include the cabling and looms.
28.02	Ticketing equipment	All equipment related to ticketing and fare validation equipment including remote Oyster card readers.
28.03	Notices	All passenger related interior notices, labels and signs, as well as relevant logos and notices for the exterior.

Part 2- NBfL Contractual Performance and Testing Specifications – Approval Criteria

Appendix	NBfL Specification		TfL Std Bus Spec. Attachment	Title	Inclusions/Exclusions and Variations when applied to NBfL	Approval Criteria and Tolerances
	Section	Title				
1 2	3.02	Emissions	1 & 2	Diesel Bus Emissions Test Process Hybrid Bus Emissions Test Process	Procedure is as given in Attachment 1 with additional Hybrid specific requirements from Attachment 2. Stated objective standards not applicable, these are given in NBfL specification.	Emission and fuel consumption tests are carried out in conjunction. Acceptable results must be obtained within three test submissions after which the test is declared failed. Results in all emission categories must be equal to or less than the target figure to warrant a pass result.
3	3.03	Noise	3	Noise Test Process and Standards	Introduction and section relating to Hybrid bus applies.	Vehicle may be submitted three times for test before being declared failed. All results must be <+1dB(A) of the specified level or the bidder's declared target level to warrant a pass result.
4	6.11	Internal Noise	3	Noise Test Process and Standards	Introduction and section relating to Hybrid bus applies.	Vehicle may be submitted three times for test before being declared failed. All results must be <+1dB(A) of the specified level or the bidder's declared target level to warrant a pass result.
1 2	7.01	Fuel Economy	1 & 2	Diesel Bus Emissions Test Process Hybrid Bus Emissions Test Process	Procedure is as given in Attachment 1 with additional Hybrid specific requirements from Attachment 2. Objective standard is stated in NBfL specification.	Emission and fuel consumption tests are carried out in conjunction. Acceptable results must be obtained within three test submissions after which the test is declared failed. The fuel consumption result must be equal to or less than the specified economy requirement or bidder specified target figure to warrant a pass result.
5	13.02	Heating Ventilation & Cooling - Performance	12	Heating and Ventilation System Operational Settings and Test	Requirement for hopper windows is optional.	A tolerance of +/-0.5deg C may be applied to temperature settings. A minimum of 5 deg C temperature reduction must be obtained in the upper

Appendix	NBfL Specification		TfL Std Bus Spec. Attachment	Title	Inclusions/Exclusions and Variations when applied to NBfL	Approval Criteria and Tolerances
	Section	Title				
				Process		deck pull down test.

NBFL SPECIFICATION SCHEDULE 1 PART 2

**APPENDIX 1 - EXTRACT FROM TFL STANDARD BUS SPECIFICATION FOR
NBFL CONTRACT PURPOSES ONLY**

ATTACHMENT 1

Diesel Bus Emissions Test Process

The bus for testing provided either by the manufacturer or TfL from an operator shall be to the London specification and fitted with all equipment necessary for operation in London.

An emission testing authority is designated by TfL to ensure comparative standards and quality of testing is achieved.

Manufacturers and / or bus operator are permitted to be present during testing but are not permitted to interfere with or adjust the bus setting without full agreement of the testing authority and TfL. All adjustments will be noted by the testing authority.

Buses to arrive at the test site with a full tank of fuel, including AdBlue, if this option is fitted. A one litre fuel sample will be taken and retained for analysis if required.

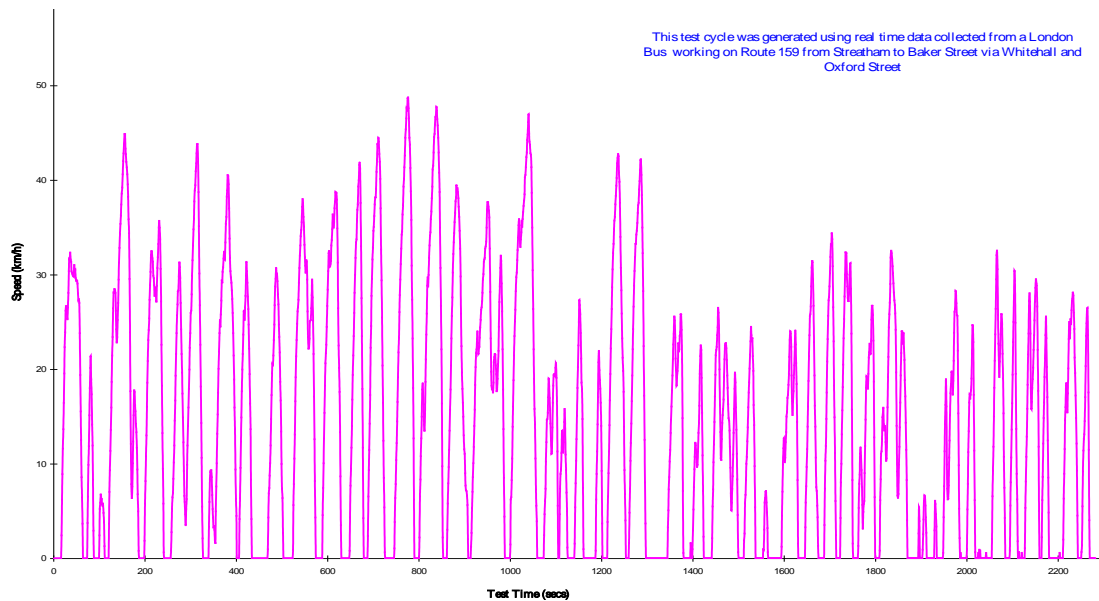
The test bus is weighed to obtain the kerb weight and compared to the ULW as certified on the side of the bus.

The emissions test is a laden test with half the bus total seated capacity added to the measured kerb weight to determine the test inertia. A passenger weight of 63kg per passenger is used. This will be increased to 68kg for testing after October 2011. A crew weight of 75kg is also added

Tyre pressures are set to the bus manufacturer's recommendation and exhaust system is checked for leaks.

The bus is then linked to a chassis dynamometer in a test chamber for emissions testing. The test chamber is held at a temperature of 18c and speed sensing fans are positioned to simulate actual road speed in the test chamber.

The tests consist of stop-start Millbrook London Transport Bus (MLTB) cycle emission tests as shown below.



The bus engine is warmed up by driving a full test cycle before the actual test. Only equipment necessary to operate a safe testing of the bus is required to be in operation during the emissions test. i.e. Heating or cooling etc is not required to be in operation.

The bus will be run over three validated cycles of the above test to produce an average result in the report.

A further test of a static 2 minutes on engine idle and a stationary to max engine power on full acceleration at the same test inertia will also be reported for the same range of emissions.

Bag analysis of HC, CO, NO_x, CO₂ and Pm is reported for each test. The cycle is split into two phases (Outer and inner London) and emissions are reported on each phase and an overall test total, in grammes and grammes/kilometre for each pollutant.

The test is completed in triplicate and the following emissions data is reported:

- Engine NO_x, NO, NO₂, HC, CO, CO₂ at 1 Hz
- Tailpipe NO_x, NO, NO₂, HC, CO, CO₂ at 1 Hz
- FTIR at tailpipe
- ELPI at tailpipe
- Two dilute 'bags' collected and analysed for NO_x, CO, HC & CO₂
- PM is measured gravimetrically using a filter paper
- Fuel Consumption in Litres / 100km

The emission test summary sheet showing all 'bag' data is then provided to TfL showing all 'legislated' and TfL requested pollutants.

A full detailed report for TfL evaluation, on the test results and a comparison against an appropriate vehicle, selected by TfL is made by the testing authority.

NBfL Specification Schedule 1 Part 2

Appendix 2 - Extract from TfL Standard Bus Specification for NBfL Contract Purposes Only

ATTACHMENT 2

Hybrid Bus Emissions Test Process and Objective Standards

The bus for testing provided either by the manufacturer or TfL from an operator shall be to the London specification and fitted with all equipment necessary for operation in London.

The hybrid bus testing process shall follow the same details as set out for diesel buses in Attachment 1 with the following addition.

1. Clamps to measure electrical current or an approved method with the bus manufacturer are fitted to monitor and measure the energy into and out of the battery/energy storage device, during the test runs for the purpose of an energy balancing calculation. The tests are repeated sufficient times to allow a suitable energy balance for compliance with SAE J2711 test methodology to be determined.

The emission test summary sheet showing all 'bag' data is then provided to TfL showing all 'legislated' and TfL requested pollutants.

A full detailed report for TfL evaluation, on the test results and a comparison against the TfL objective Hybrid Bus emissions standard and the DfT/LCVP Green Bus standard is made by the testing authority.

TfL Objective Hybrid Bus Emissions Standards are shown below in g/km as a no more than result

Single Deck up to 12m Overall length

- HC @ 0.012
- CO @ 0.050
- NOx @ 1.500
- Pm @ 0.010
- CO2 @ 700
- Fuel @ 25 Litres/100km

Double Deck up to 11m Overall Length

- HC @ 0.015
- CO @ 0.040
- NOx @ 7.500
- Pm @ 0.030
- CO2 @ 850
- Fuel @ 33 Litres/100km

NBfL Specification Schedule 1 Part 2

Appendix 3 - Extract from TfL Standard Bus Specification for NBfL Contract Purposes Only

ATTACHMENT 3

Noise Test Process and Standards

The bus for testing provided either by the manufacturer or TfL from an operator shall be to the London specification and fitted with all equipment necessary for operation in London.

A noise testing authority is designated by TfL to ensure comparative standards and quality of testing is achieved.

Manufacturers and / or bus operator are permitted to be present during testing but are not permitted to interfere with or adjust the bus setting without full agreement of the testing authority and TfL. All adjustments will be noted by the testing authority.

In addition to the legal Type approved drive-by Noise test (70/157/EEC) the following LBSL Noise testing is required on all buses proposed for operation as a Type approval basis by each bus manufacturer

The LBSL Testing should take place at the same time, in the same manner and location as the legal drive-by test (On a ISO 10844:1997 test surface) with detailed results of both provided on the manufacturer declaration. Specific LBSL testing must reflect a typical in service, unladen, engine at normal operating temperature, fans / auxiliary equipment functioning and at least 65% tyre tread depth available.

The current LBSL noise levels for each type of bus are:-

Single Deck Buses from 8.5m up to 11m in overall length

- *Improved Legal drive-by, no more than 75 dB(A) either side*
 - Interior during drive-by, no more than 74dB(A) at centreline of bus 1m above rear axle
- Legal drive-by Test, no more than 77dB(A) either side when conducted as
 - Start point, bus travelling at 10 kph
 - Start point, bus applied full throttle in automatic until end point
- Legal drive-by Test, no more than 80dB(A) either side with all auxiliary equipment operating at full capacity (Including engine cooling fans)
- Legal drive-by Test, no more than 82dB(A) either side with all auxiliary equipment operating at full capacity (Including engine cooling fans), when conducted as
 - Start point, bus travelling at 10 kph
 - Start point, bus applied full throttle in automatic until end point
- Interior saloon, driving at constant 16 kph for 30 seconds on straight road Measured at 1m height, on centreline of bus on front axle and rear axle datum, no more than shown
 - Lower Saloon
 - Front Axle 58 dB(A)

- Rear Axle 61 dB(A)
- Interior saloon, driving at constant 40 kph for 30 seconds on straight road
Measured at 1m height, on centreline of bus on front axle and rear axle datum, no more than shown
 - Lower Saloon
 - Front Axle 65 dB(A)
 - Rear Axle 68 dB(A)
- Improved Compressed Air, no more than 65 dB(A) either side

Double Deck Buses up to 11m in overall length

- Improved Legal drive-by no more than 77dB(A) either side
 - Interior during drive-by, no more than 76dB(A) at centreline of bus 1m above rear axle
- Legal drive-by Test, no more than 79 dB(A) either side when conducted as
 - Start point, bus travelling at 10 kph
 - Start point, bus applied full throttle in automatic until end point
- Legal drive-by Test, no more than 82dB(A) either side with all auxiliary equipment operating at full capacity (Including engine cooling fans),
- Legal drive-by Test, no more than 84dB(A) either side with all auxiliary equipment operating at full capacity (Including engine cooling fans), when conducted as
 - Start point, bus travelling at 10 kph
 - Start point, bus applied full throttle in automatic until end point
- Interior saloon, driving at constant 16 kph for 2 minutes on straight road.
Measured at 1m height, on centreline of bus on front axle and rear axle datum, no more than shown

	Lower Saloon	Upper Saloon
Front Axle	61 dB(A)	53 dB(A)
Rear Axle	64 dB(A)	54 dB(A)

- Interior saloon, driving at constant 40 kph for 2 minutes on straight road.
Measured at 1m height, on centreline of vehicle on front axle and rear axle datum, no more than shown

	Lower Saloon	Upper Saloon
Front Axle	68 dB(A)	60 dB(A)
Rear Axle	70 dB(A)	60 dB(A)

- Improved Compressed Air, no more than 65 dB(A) either side

Single Deck or Double Deck Buses over 11m in overall length

- Improved Legal drive-by, no more than 77dB(A) either side
 - Interior during drive-by, no more than 76dB(A) at centreline of bus 1m above rear axle
- Legal drive-by Test, no more than 79 dB(A) either side when conducted as
 - Start point, vehicle travelling at 10 kph
 - Start point, vehicle applied full throttle in automatic until end point
- Legal drive-by Test, no more than 82dB(A) either side with all auxiliary equipment operating at full capacity (Including engine cooling fans),
- Legal drive-by Test, no more than 84dB(A) either side with all auxiliary equipment operating at full capacity (Including engine cooling fans), when conducted as
 - Start point, bus travelling at 10 kph
 - Start point, bus applied full throttle in automatic until end point

- Interior saloon, driving at constant 16 kph for 30 seconds on straight road. Measured at 1m height, on centreline of bus on front axle and rear axle datum, no more than shown

	Lower Saloon
Front Axle	61 dB(A)
Mid Axle	58 dB(A)
Rear Axle	64 dB(A)

- Interior saloon, driving at constant 40 kph for 30 seconds on straight road. Measured at 1m height, on centreline of bus on front axle and rear axle datum, no more than shown

	Lower Saloon
Front Axle	68 dB(A)
Mid Axle	58 dB(A)
Rear Axle	70 dB(A)

- Improved Compressed Air, no more than 65 dB(A) either side

Hybrid Single or Double Deck Buses up to 11m in overall length

- Improved Legal drive-by, no more than 74dB(A) either side
 - Interior during drive-by, no more than 73dB(A) at centreline of bus 1m above rear axle
- Legal drive-by Test, no more than 74 dB(A) either side when conducted as
 - Start point, vehicle travelling at 10 kph
 - Start point, vehicle applied full throttle in automatic until end point
- Legal drive-by Test, no more than 78dB(A) either side with all auxiliary equipment operating at full capacity (Including engine cooling fans)
- Legal drive-by Test, no more than 79dB(A) either side with all auxiliary equipment operating at full capacity (Including engine cooling fans), when conducted as
 - Start point, vehicle travelling at 10 kph
 - Start point, vehicle applied full throttle in automatic until end point
- Legal drive-by Test, no more than 77dB(A) either side with all auxiliary equipment operating at full capacity (Including engine cooling fans), when conducted as
 - Start point, engine operating at maximum RPM / power output as experienced in service
- Coast down to bus stop Test, no more than 75dB(A) either side with all auxiliary equipment operating at full capacity (Including engine cooling fans), when conducted as
 - Start point, vehicle travelling at 30 kph
 - Centre point (Microphone position) at front entrance door, bus applied maximum braking, microphone position simulating bus stop.
- Drive away from bus stop Test, no more than 76dB(A) either side with all auxiliary equipment operating at full capacity (Including engine cooling fans), when conducted as
 - Start point, vehicle travelling at 30 kph
 - Centre point (Microphone position) at front entrance door, bus applied maximum braking, microphone position simulating bus stop.
- Interior vehicle, driving at constant 16 kph for 2 minutes on straight road. Measured at 1m height, on centreline of vehicle on front axle and rear axle datum, no more than shown

	Lower Saloon	Upper Saloon
Front Axle	60 dB(A)	52 dB(A)
Rear Axle	63 dB(A)	53 dB(A)

- Interior vehicle, driving at constant 40 kph for 2 minutes on straight road. Measured at 1m height, on centreline of vehicle on front axle and rear axle datum, no more than shown

	Lower Saloon	Upper Saloon
Front Axle	67 dB(A)	59 dB(A)
Rear Axle	69 dB(A)	59 dB(A)

- Improved Compressed Air, no more than 65 dB(A) either side

The noise declaration form as Attachment 4 must be verified by each manufacturer and submitted to LBSL for acceptance. It may be subject to independent assessment during or after submission.

These requirements will be constantly reviewed and updated as technology and manufacturing capability develops. They may be improved upon at any time.

NBfL Specification Schedule 1 Part 2

**Appendix 4 - Extract from TfL Standard Bus Specification for NBfL Contract
Purposes Only**

DELETED - LIGHTING LEVEL REQUIREMENTS

NBfL Specification Schedule 1 Part 2

Appendix 5 - Extract from TfL Standard Bus Specification for NBfL Contract Purposes Only

ATTACHMENT 12

Heating and Ventilation System Operational Settings and Testing Process

All buses must be fitted with a minimum of a fully automatically temperature controlled heating system. No driver cab or engine bay operation should be necessary to adjust or set the passenger saloon heating system during variations of temperature over the summer and winter periods.

Independent driver controlled demisting system and Independent driver controlled cab air conditioning.

All double deck buses must additionally be fitted with an automatically temperature controlled upper deck air cooling system.

Manufacturers should set individual sections of the heating and ventilation system to operate at the following targets

1. a) Heating

On $\leq 15^{\circ}\text{C}$, thermostat on gradual shut down within $-ve 4^{\circ}\text{C}$
Off $\geq 15^{\circ}\text{C}$, thermostat fully shut down (No hot water flow)

b) Ventilation

Natural fresh air via opening side windows at all times by passenger selection

2. Cab / Drivers Screen Demisting

Manual Driver selection
Capable of independent operation at all times

3. Drivers Cab Air conditioning

Manual Driver selection
Capable of independent operation at all times. However if the drivers cab air conditioning is on, the upper deck air-cooling may function on a slow setting to balance the cooling system.

4. Air Cooling (Upper Deck Only)

Off $< 21^{\circ}\text{C}$, fully shut down
On $> 21^{\circ}\text{C}$, gradual build up to maximum capacity output at 26°C ,
A maximum cooling capacity capable of a reduction of 5°C is required when interior saloon temperature is 28°C over a 30 minute pull down test as described below.

If Driver's cab air conditioning is off, upper deck air-cooling will function

independently on its automatic temperature settings

All bus models will be tested in a temperature controlled chamber at a temperature of 28°C and must achieve the pull down procedure shown below to validate settings and efficiencies.

These requirements will be constantly reviewed and update as technology and manufacturing capability develops.

Upper deck Air Cooling Validation Test

The objective of this test is to validate the cooling performance of the upper saloon air cooling systems. This test is carried out simultaneously with a test to validate the cooling performance in the driver's cab.

The bus for testing provided either by the manufacturer or TfL from an operator shall be to the London specification and fitted with all equipment necessary for operation in London.

The testing authority is designated by TfL to ensure comparative standards and quality of testing is achieved.

Manufacturers and / or bus operator are permitted to be present during testing but are not permitted to interfere with or adjust the bus setting without full agreement of the testing authority and TfL. All adjustments will be noted by the testing authority.

The testing authority shall temporarily fit four thermocouples. Three on the upper deck and one in the driver's cab.

The upper deck thermocouples will be located 1.2 metres above the floor of the upper saloon, along the longitudinal centreline of the bus (mid-gangway). The forward / rearward position of the three thermocouples should be as follows;

- Thermocouple 1 (front) should be located at a position aligning with the middle of the seat base of a seat at the very front of the upper saloon on the nearside.
- Thermocouple 2 (middle) should be located at a position aligning with the middle of the seat base of a seat on the 7th row (from front) of the upper saloon on the nearside.
- Thermocouple 3 (rear) should be located at a position aligning with the middle of the seat base of a seat at the very back of the upper saloon on the nearside.

The driver's cab thermocouple will be located 1.2 metres above the floor for the driver's feet, on the centreline of the driver's seat base when the driver's seat is set to a mid-position on its forward / rearward slider.

The thermocouples are connected to a data logger capable of recording the temperature at each point at a maximum of 1 minute intervals. The results from the data logger shall be the only results utilised to evaluate the test procedure.

The Bus will be put in a closed climate control chamber set at a temperature controlled to hold 28°C (+/- 1°C). It is permissible to open the vehicle windows, doors

or roof vents as considered necessary to speed up the soak time.

The soak condition is considered to be met when all four thermocouples record a steady state of 28°C for a 15 minute duration (+/- 1°C) after a minimum soak time of 1 hour.

It is not permissible to use any additional heat sources within the vehicle during the soak period.

A minimum of 15 minutes of data should be recorded to demonstrate a stable soaked temperature. During this time if the temperature of any sensor drops below 28°C the 15 minutes should be reset.

The bus engine will be started when the following preparations checks are made for the test:

- All windows, roof vents and doors are closed
- The thermocouples are correctly positioned
- The data recorder is running.

When the bus engine is started the upper saloon air cooling should come on automatically (as above 21°C). The driver's cab air conditioning should be turned on, set to maximum capacity, maximum fan speed and if there is a control to direct the airflow it should be directed to the driver position rather than the windscreen. If possible all dash vents, floor vents or ceiling vents in the driver's cab can be directed towards the sensor position as far as practical. If the cab air conditioning has a damper flap to select between fresh air and recirculated air then the recirculated air function should be selected. The drivers windscreen demist system should be turned off and any associated vents closed.

For the complete duration of the test the engine of the bus should be run at the bus engine idle speed. If any recirculation air supply is optional or variable the system should be set to maximum fresh air supply. Any demisting or other system that provides air to the upper saloon must be isolated to not interfere with the test results.

The data logger timer should then start.

The test will measure the temperature drop delivered by the system over a 30 minute period on a minute by minute basis.

All three saloon thermocouples should achieve the target reduction temperature of 23°C within the first 20 minute period and be capable of holding the temperature below the 23°C for the remaining 10 minutes. Averaging the results is not acceptable.

The testing authority will produce a graph of the Pull Down showing the temperature recorded by each individual thermocouple – temperature against time. Ambient chamber temperature will also be included on each graph. A spreadsheet showing the results from each thermocouple and ambient chamber temperature will accompany the graphs.

NBfL Specification Schedule 1 Part 2

Appendix 6 - Extract from TfL Standard Bus Specification for NBfL Contract Purposes Only

ATTACHMENT 6 - REVISED

Materials Fire Retardancy Standards

The following schedule of component materials Fire Retardancy Standards must be verified by each manufacturer and may be subject to independent assessment during or after submission.

All internal components in the bus not specified below must meet the applicable specification in EC Regulations 118.

The current minimum LBSL Materials Fire Retardancy Standards for each type of material used on a vehicle are: -

- All materials forming fire barrier between engine bay and passenger saloons, BS476 Class 1, on engine-facing surfaces. This overrides other points below.
- All GRP materials utilized interior and exterior, BS476 Class 3 front surface, BS476 Class 2 back surface.
- Melamine Laminates (side or roof panels), BS476 Class 2
- All completed flooring (plywood or alternative, including floor covering) BS476 Class 2 on upper surface, BS476 Class 3 on lower surface.
- Seat frames (ABS or Polycarbonate), UL94V0
- Seat assemblies, BS5452 Crib 7
- Body Insulation, BS 476 Class 2
- All internal ABS products (capping and finishing trims), UL94V0
- Body and Floor insulation, BS476 Class 2

The above materials or treatment used to achieve the standard must be capable of achieving the required standard when suitably cleaned or maintained over the operational life of the bus.

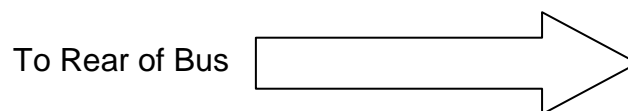
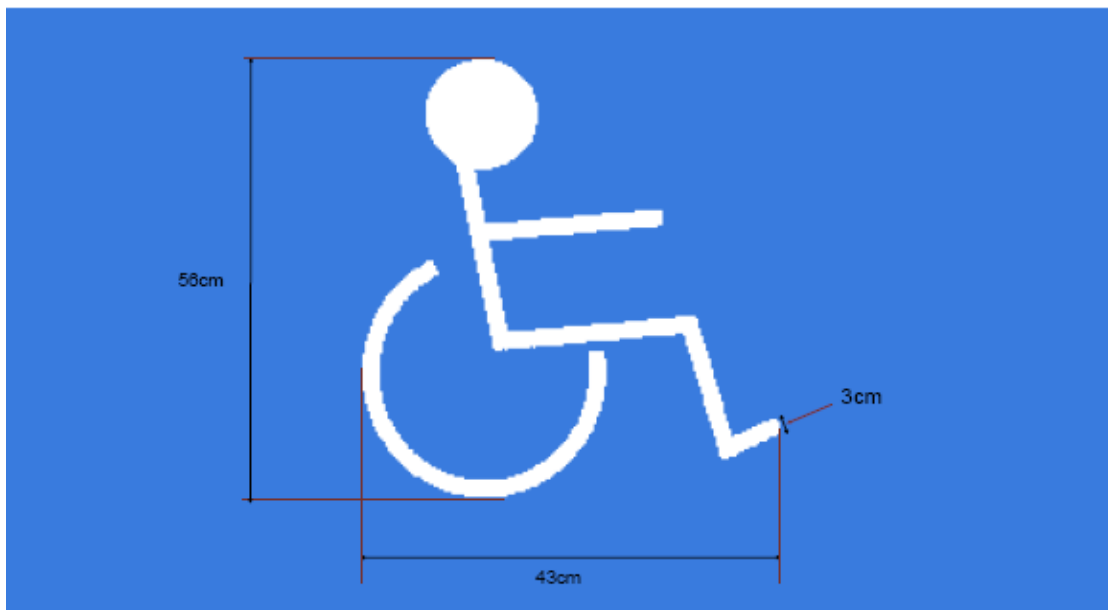
Replacement components and their associated material must achieve the original standard.

NBfL Specification Schedule 1 Part 2

Appendix 7 - Extract from TfL Standard Bus Specification for NBfL Contract Purposes Only

ATTACHMENT 10

Wheelchair Floor Logo and Layout



Floor covering of the total Wheel chair bay as shown by manufacturers drawings (Attachment 7) in Blue Ref PMS 300 (As blue in wheelchair notice) and wheelchair logo in plain White. Mild fleck in the base colours may be added to increase durability of the floor covering.

The logo in the wheelchair floor area should be of the identical style to the above and be approximately to the stated dimensions.

The logo in the wheelchair bay should always be positioned to demonstrate the actual position of the wheelchair.

The horizontal centre line of the logo should be on the centre line of the vertical wheelchair back board and be no more than 550mm from the front of the wheelchair board to the centreline of the logo.

NBfL Specification Schedule 1 Part 2

Appendix 8 - Extract from TfL Standard Bus Specification for NBfL Contract Purposes Only

DELETED – ACCELERATION

NBfL Specification Schedule 1 Part 2

Appendix 9 - Extract from TfL Standard Bus Specification for NBfL Contract Purposes Only

ATTACHMENT 14

Close Circuit Television System Requirements and Specification

1. General Specification

1.1 Connectivity

- A. The DVR shall have the following interfaces:-
 - i) A Local Area Network (LAN) interface, presented as Ethernet through an RJ45 connection.
 - ii) An integrated 3G modem.
- B. The integrated 3rd Generation Mobile Network (3G) modem, there is a preference that this card fits within the Digital Video Recorder (DVR) thus minimising installation costs.
- C. The LAN and 3G modem interfaces shall be password protected and have multiple levels of access i.e. administration, user, read only.
- D. The solution shall provide an open interface accessible via the LAN or 3G modem to allow full control of the DVR. The specification, protocols used and command strings will be provided to London Bus Service Limited (LBSL) on request.
- E. LBSL reserves the right to use these interfaces.

1.2 Function

- A. The image resolution shall be 2CIF or better, 2 CIF will be set as a default.
- B. Each camera input shall be capable of recording at 25 frames per second at the maximum image size and highest image quality concurrently.
- C. The CCTV system shall have the flexibility to select the frame rate for each individual camera up to the maximum rate.
- D. The DVR shall support a minimum total global frame rate of 100 frames per second.
- E. The DVR shall support 16 camera inputs as a minimum.
- F. The DVR shall have an easily removable hard disc for external monitoring or ability to be downloaded via external connection.
- G. Bus data to be recorded on the disc drive
 - i) Bus road speed taken from the GPS, foot brake application and traffic Indicator "left and right" recorded with date and time identification
 - ii) Recording not to be displayed on driver's cab monitor or passenger monitor
- H. All images shall be watermarked or equivalent.
- I. The DVR shall have the capability to record an audio input from two or more microphones.

- J. The DVRs shall use a high compression video codec to encode and store the image data on the hard disk, this shall be one of the following:-
 - a. MPEG4 Part 2
 - b. MPEG Part 10 (ISO/IEC 14496-10 version 1)
 - c. ITU-T H.264.

Note: the use of any other codec is prohibited

- K. The DVR shall be able to dual stream i.e. code an image at different rates such that a low rate can be stream for Live CCTV and a higher rate recorded to disk for collection later. This shall be possible with one or more of the codecs listed in 1.2J above.
- L. The DVR shall be Live Closed Circuit Television (CCTV) capable so that should LBSL decide to rollout Live CCTV in the future the DVR will support this, more specifically:-
 - 1) The DVR shall have the capability to stream video through either of the interfaces, LAN and 3G modem, to a control and management system developed for the solution.
 - 2) The system shall have a documented interface from the control and management system that is made available to TfL for use in a potential Central CCTV Control and Management system.
 - 3) The system's control and management system shall be able to:-
 - i. Manage the video stream i.e. start/stop, pause, Fast Forward, Rewind during the event etc.
 - ii. Select the camera required.
 - iii. Select multiple cameras in thumb nail form.
 - iv. Manage the parameters that control the quality of the video stream.
 - v. Perform System Administration and Operations and Maintenance functions.
- M. The unit shall have an NMEA compatible Global Navigation System interface.
- N. The system clock shall have a resolution of 1 second and the time will be maintained to an accurate to +/- 10 seconds

1.3 Diagnostic Interface

- A. The unit shall have the TfL diagnostic interface implemented and approved for use with iBus.
- B. The LAN interface of the DVR will be made available to LBSL for diagnostics and other uses agreed at a later date.

1.4 Cameras

- A. All cameras shall be analogue and antiglare
- B. The cameras used shall be high quality colour 480TVL day/night or low light.
- C. All cameras must be housed in a Vandal Resistant Dome or Concealed
- D. Wide angle lenses utilised where necessary to improve vision coverage as identified on Bus type layout drawings in Attachment 7

1.5 Displays

- A. The displays shall be LCD colour monitors.
- B. All the displays shall show the time which is derived from the system radio adjusted clock.
- C. The display shall be available in the following sizes:-
 - i) 5" or equivalent suitable for locating in the drivers cab
 - ii) 15" or equivalent suitable for placing in the passenger area

1.6 Type Approval

- A. The CCTV systems shall be designed to operate in a public transport environment. The operator will be required to supply type approval for:-
 - i) e Mark
 - ii) Electromagnetic Compatibility
 - iii) Shock and Vibration
 - iv) Temperature
 - v) Water ingress

Note: the CCTV system comprises the DVR, Cameras, intermediate cables, screens, connectors and any ancillary equipment.
- B. The integrity of the type approval shall be maintained throughout the life of the contract.
- C. The cameras should be rated as IP65 as a minimum.

2.0 Implementation

2.1 Installation

- A. The CCTV systems shall be built in accordance with the TfL CCTV System Installation Guidelines. The key aspects of this are:-
 - i) LBSL approval of the installation, the operator will present the installation instructions for approval prior to build.
 - ii) Documentation, the operator shall maintain the documentation for each build type and make them available for LBSL inspection.
 - iii) Co-existence with iBus, where possible the DVR shall be placed in the same location as the iBus unit.
- B. The DVRs shall be designed to work with the bus native power supply; any additional equipment necessary for this shall be considered part of the CCTV system.
- C. The DVRs shall remain on for 20 minutes once the ignition has been turned off.
- D. Installers of the CCTV system should be accredited to FCS 1362 (formally MPT 1362) or equivalent.
- E. LBSL reserve the right to inspect the installation at source to ensure the standards are being applied appropriately.

2.2 Configuration

- A. The image quality configuration parameters will be set to a TfL default as a minimum.
- B. Each camera will be set to a frame rate as defined by TfL as shown in the table below.

Location	Reference	Frame rate
Entrance/Exit Platform, wheelchair space and Passenger / Driver Interface	A1, A2	4
Rear of interior seated area	A3, C1	4
General passenger space	A4, B1, C2, C4	4
Forward facing to road	A5	4
Driver's Cab	A6	4
Stair Well	C3	4

Note: the reference refers to the camera locations specified in section 2.3.

- C. The operator will ensure that the parameters in Sections 2.2 A and B are maintained throughout the life of the contract.
- D. TfL may choose to change this throughout the life time of the contract.
- E. Note: the parameters will only be changed in exceptional circumstances.
- F. The DVR will provide a minimum of 240 hours of storage space for each bus at the quality and frame rates defined above. The dimensioning of this should account for operating environment i.e. level of movement and lighting conditions.
- G. If the operator uses the CCTV system beyond the minimum requirement set out here any additional CCTV resources that are required shall be supplied by the operator such that minimum requirements set out in this specification are met.

2.3 Camera Locations

The cameras shall be identified on the DVR system by the camera alpha numeric code as shown below (When two are cameras used to cover one location /1 or /2 should be added). Cameras must be located in accordance with the following guidelines for monitored areas with the area identified on channels as shown and as approved on Bus type layout drawings in Attachment 7.

All operator required additional cameras identified on subsequent channels as O13, O14 and above as necessary.

A. Mandatory All Buses (SD, DD)

1. Entrance Platform and Passenger / Driver Interface (Channel 1)
2. Exit Platform, Wheelchair Space and Deployed Ramp Area - Viewing Wheelchair Space only on Single Door Buses under 9m

- (Channel 2)
3. Two cameras at rear of interior seated area looking forwards covering minimum rear five-way and last four rows of seats. Alternatively use of single camera with a wide-angle lens. (Channel 3 and 4 if two utilised)
 4. Between the centre door and the front of the bus which may be mounted either at the front looking rearwards or at the centre door looking forwards. (Channel 5)
 5. Forward facing to road ahead of bus (Channel 6)
- Optional / Recommended
6. Interior Drivers Cab looking towards Drivers Signalling Window (Channel 7)

B. Additional Mandatory All Single Deck Buses Over 10.4m length

1. Centre door and the rear of the bus, looking rearwards (Channel 8)

C. Additional Mandatory All Double Deck Buses

1. Two cameras at rear of upper saloon interior seated area looking forwards covering minimum rear five-way and last four rows of seats. Alternatively use of a single camera with a wide-angle lens. (Channel 9 and 10 if two utilised)
2. Lower saloon between the centre door and the rear of the bus which may be mounted either at the rear looking forwards or at the centre door looking rearwards. (Channel 11)
3. Top of stairwell looking downwards (Channel 12)
4. Front of upper saloon interior seated area looking rearwards (Channel 13)

Note: Prior to building of the bus the operator shall confirm that the camera layout drawing has an approval reference (as Attachment 7) given by LBSL. In the case where the layout does not meet the LBSL approved reference / guidelines the operator will be required to revise appropriately.

2.4 Displays

- A. There shall be a display in the drivers cab, the display:-
 - i) Shall be a 5" or equivalent LCD colour monitor.
 - Suitably mounted in drivers cab area
 - Monitor to display the system time clock
 - ii) Shall, as default, display the exit platform and ramp deployment area when the centre exit door opens.
- B. There shall be a display in the passenger area, the display:-
 - i) Shall be a 15" or equivalent LCD colour monitor positioned in the lower saloon.
 - ii) Shall be suitably and securely mounted behind a vandal resistant protective screen.
 - Monitor to display the system time clock

- iii) Shall be generally positioned so that the maximum number of passengers entering the bus will have the opportunity to view the screen when in one of the following positions:-
 - Rearward exit door partition facing forwards
 - Staircase to aisle fascia lower saloon facing inwards to centre of bus
 - Staircase rearward partition facing up the staircase and viewable from lower saloon aisle at staircase entrance.
 - iv) Monitor will continuously cycle around all the cameras remaining on each camera for 5 seconds and end with an all camera view.
 - v) Shall be installed in a manner consistent with the current iBus policy.
- C. Use of displays on the upper deck is prohibited.

2.5 Security

- A. The DVR and any additional equipment necessary for Live CCTV shall be enclosed in a secure, lockable and vandal proof enclosure that is located in accordance with the TfL design guides.

3.0 Operation

3.1 Performance

TfL will be providing a diagnostic and reporting capability utilising the current iBus system and will work with the DVR suppliers to ensure the DVR interface (Section 1.3) is developed and approved for use by TfL. The following is based on the use of this capability.

- A. The performance of the CCTV system shall be 98% availability. For a system to be available the following is required:-
 - a. The DVR and ancillaries are fully operational
 - b. The DVR configuration is correct
 - c. The system time is correct to +/- 10 seconds
 - d. All but one of the cameras is working i.e. 1 camera failure is allowed without reducing the availability in the first week. For week 2 and onward the system is considered unavailable.

Availability is defined as:-

$$\frac{\text{Total Time period} - \text{Total Hours unavailable during time period}}{\text{Total Time Period}}$$

Time Period is the sum of all the operational hours of buses operating on contracts compliant with this specification during a period.

Total Hours unavailable during a time period is the sum of all the unavailable hours of buses operating on contracts compliant with this specification during a period

Unavailable Hours are calculated from the time the fault status is made available to the operator to the time the system is fixed.

For a system to be considered as unavailable one or more of the criteria in a. to d. above is not met.

The period is 28 days.

3.2 Audit

- A. The operator will be audited to ensure compliance against the required performance. The operator will be expected to maintain records of:-
 - i) CCTV system inspections.
 - ii) Faults identified and date/time fixed.
- B. The operator will provide Availability reports on request.
- C. LBSL shall have the right to audit against the requirements in this specification to ensure traceability and accuracy of the data recorded.

3.3 Enforcement

Should the operator breach the availability targets then the operator shall put in place a recovery plan.

3.4 Provision of Data

The operator framework agreement contains all information related to the provision of data and should be reviewed as an overview of this Attachment.

SCHEDULE 2

PROJECT MILESTONES

Milestone Number	Description	Date
0	Approval of baseline project plan and stage approval process (including dates for intermediate approvals).	End January 2010
1	Detailed design – delivery of mock-up phase final design.	End January 2010
2a	Approval of GA drawing.	End January 2010
2b	Approval of front & rear end styling pack.	End January 2010
3a	Delivery of basic layout validation static mock-up stage 1 to London (or agreed location within UK).	End February 2010
3b	Delivery of “dressed” static mock-up stage 2 to London (or agreed location within UK).	End June 2010
4a	Approval of Stage 1 mock up to proceed with Stage 2 and proving vehicle.	End March 2010
4b	Detailed design - approval of proving & prototype vehicle specification and design.	
4c	Approval of front and rear end styling mock ups to proceed to Stage 2 mock up.	
5	Completion and delivery of proving vehicle.	November 2010
6a	Completion of proving testing PART 1.	February 2012
6b	Completion of proving testing PART 2.	31 January 2013
7	Delivery of certified prototype vehicle to LBSL to an agreed location in London.	April 2011
8	Completion of prototype vehicle road and route testing in London.	June 2011
9a	First vehicle inspection.	Sept 2011
9b	Fifth vehicle inspection in build.	Nov 2011
9c	Delivery of 5 certified production vehicles in full operational service specification. (Milestone based on the date of delivery of Vehicle No.5).	January 2012
10	Residual payment after completion of delivery of initial batch of 5 vehicles in Milestone 9.	March 2012

11	Factory completion of prototype No.8	31 May 2012
12	Residual payment after completion of delivery of two additional Vehicles in Milestone 11	31 January 2013

SCHEDULE 3

VEHICLE INSPECTION REPORT

Whole Vehicle Type Approval will be in force for all vehicles supplied by the Contractor by the time NBfL Vehicles are being supplied.

The Contractor is currently preparing the internal processes required for this change of legislation.

At time of delivery each Vehicle will be supplied with a "Certificate of Conformity". This is a quality controlled document (QCD380) issued by our Quality department on tamper proof paper.

This document is produced under the Quality Control Processes (QP20) which defines the various stages of approval that must be satisfied before the "Certificate of Conformity" can be released.

The internal quality control inspection is defined by QIP002, and the successful completion of this process is, defined under QP20, a key requirement for the release of a "Certificate of Conformity".

For reference, draft versions of these documents are included within this section. However, it should be noted that the Contractor is still in the process of approving these new procedures required for WVTA and that they may be subject to change until final approval at Board level.

Certificate of Conformity

Quality Control Processes

Internal Quality Control Inspection

SCHEDULE 4

PRICE SUMMARY AND PAYMENT SCHEDULE

1. Currency and Base Date

The pricing in this Schedule is in Sterling (GBP).

2. Production Pricing (in accordance with 7A.5, 600 vehicles)

£354,500 per vehicle.

3. Vehicle Maintenance and Support Pricing

The price(s) for Maintenance and Support in accordance with Schedule 14 are:

R&M Package	5 year R&M	7 year R&M
Standard	██████	██████
Including option 14 day inspection	██████	██████

Notes:

- i) Price is per vehicle per month
- ii) Assumes a fleet of 40 buses in each garage

4. Vehicle Maintenance and Support Price Variation

The key cost drivers related to Vehicle Maintenance and Support for consideration by the Price Review Board are as set out below and will be considered on the basis of objective evidence as to the change in price concerned which the Contractor shall supply:

Description of Key Cost Driver	Cost of Key Cost Driver	Percentage (%) of Total Vehicle Maintenance and Support Annual Price
Labour Rates	Technician labour rate	██████
Hybrid Battery service	Battery Service	██████
Hybrid Driveline Parts	Hybrid Replacement Parts	██████
Engine Service Parts	Basket of Parts (oil, filters etc.)	██████
Brake Service Parts	Basket of Parts (discs, brakes and calipers)	██████

Suspension Parts	Service	Basket of Parts (air bags, dampers valves)	■
Total (£)/Percentage	Cost		■

5. Vehicle Maintenance and Support Payment

Payment for Maintenance and Support services provided to the Company shall be in accordance with Schedule 14.

6. Spare Parts Pricing - Unique NBfL parts only

The spare parts that are unique to NBfL include the following non-exhaustive list of items:

Part Description	Price
Front Screen	■
Front Mid Dome & Wiper pocket	■
Front upper dome	■
Front mid door	■
Front N/S corner	■
Front O/S corner	■
Rear Door Leaves kit	■
Rear top dome	■
Rear mid dome	■
Rear bottom dome	■
Rear floor	■
Rear floor platform	■
Rear glass top part	■
Rear glass centre part	■
Rear glass bottom part	■
Bell Push	■
Wheelchair Bell Push	■
Standard Seat	■
Assault screen(inc portion on cab door)	■
front staircase	■
rear staircase	■
video box	■
U/D Roof Cove	■
L/D Roof Cove N/S	■
L/D Roof Cove O/S	■
Front Staircase Treadmaster Kit	■
Rear Staircase Treadmaster Kit	■

Notes:

- i) Prices quoted are list price
- ii) Price does not include carriage or labour

Where the prices of any spare parts unique to NBfL (whether or not included in the list above) are to be reviewed in accordance with this Contract, such review will be undertaken on the basis of objective evidence as to the change in price concerned which the Contractor shall supply.

In accordance with Clause 9 of the Contract spare parts will be available for the time period specified in that Clause. In considering price increases for all parts during this period the Price Review Board shall take into account potential for the cost to be impacted by factors such the part not being in production, the non-recurring costs due to technology becoming obsolete, and tooling requirements.

7. Spare Parts Pricing Variation - Unique NBfL parts only

The key cost drivers related to Unique NBfL spare parts for consideration by the Price Review Board are as set out below and will be considered on the basis of objective evidence as to the change in price concerned which the Contractor shall supply:

Description of Key Cost Driver	Percentage (%) of Total Vehicle Price
Labour rates	N/A
Aluminium LME	N/A
GRP costs	N/A
Glass costs	N/A
Paint costs	N/A
Steel costs	N/A
PPE Index	N/A
Total Cost (£)/Percentage	

8. Change Control Pricing

Rates and prices to be used to support the calculation of cost increases / decreases resulting from change requests or variations shall be as shown below.

N.B. the actual cost of any Contract change will be agreed by negotiation in good faith to minimise the adverse impact of any change to the Company.

Description	Change Price (£)
Shopfloor Labour	
Engineer	

Development Engineer		
Chief Design Engineer or Stylist		
Homologation Engineer		
Project Manager		

Note: the entries in this table should reflect the major cost elements that will contribute to the cost of changes e.g. day rates or sub-contract rates for staff with particular skills, cost of hiring or providing facilities for test of components, systems or complete vehicles.

SCHEDULE 5

VEHICLE OPERATORS

Operator

Abellio London Limited/Abellio West London Limited

Arriva London North Limited

Arriva London South Limited

Arriva Kent Thameside/Arriva The Shires Limited

C T Plus C I C

CentreWest London Buses Limited/First Capital East Limited

Blue Triangle Buses Limited/Docklands Buses Limited/London Central Bus Company Limited/London General Transport Services Limited

United Busways Limited

London Sovereign Limited

Metrobus Limited

Metroline Travel Limited

H R Richmond Limited

East London Bus and Coach Company Limited/South East London and Kent Bus Company Limited

Sullivan Bus and Coach

Ensignbus

SCHEDULE 6

TERMS OF SUPPLY OF PRODUCTION VEHICLES TO THE COMPANY

1. If the Company wishes to purchase a Production Vehicle, the Company will place a written purchase order with the Contractor. Any deliverables to be supplied with the Production Vehicle shall be specified in the purchase order. No purchase order shall be valid or binding on the Company unless authorised by either the Managing Director or the Head of Commercial of Surface Transport of the Company. The Contractor will confirm any such orders and shall be obliged to sell and the Company will be obliged to purchase the Production Vehicles referred to in the purchase order.
2. Each Production Vehicle ordered by the Company will be delivered by the Contractor to the PV Delivery Site within the following maximum permitted periods:
 - 2.1 for any order placed within the Initial Production Period, the first Production Vehicle in such order shall be delivered within six (6) months of the date of order and the remaining Production Vehicles at an average rate of no less than sixteen (16) Vehicles per month; and
 - 2.2 for any order placed after the Initial Production Period, the Vehicles shall be delivered within twelve (12) months of the date of order,

(the “**Production Vehicle Delivery Period**”).
3. Prior to delivering a Production Vehicle to the relevant PV Delivery Site, the Contractor shall carry out the Production Tests on such Production Vehicle as set out in paragraph 5 below. The Contractor will procure that the Company Project Manager and/or any other person nominated by the Company Project Manager will be given access to the Production Site to observe the Production Tests.
4. All Production Tests shall be undertaken at the Contractor’s expense but the Company shall pay the expenses of the Company Project Manager attending the tests.
5. Production Tests.

- 5.1 Prior to delivery, the Contractor shall carry out the Production Tests for each Production Vehicle.
- 5.2 The Contractor shall give the Company Project Manager a minimum of five (5) Business Days written notice of the dates and places at which the Production Tests will be conducted on a Production Vehicle by the Contractor; provided, however, that the Company may at its sole discretion postpone the dates of any Production Tests to a date no later than fifteen (15) Business Days after the date notified by the Contractor to the Company Project Manager. The Contractor shall not proceed with any Production Tests for a Production Vehicle unless the Company Project Manager is present to witness such Production Tests. The Parties acknowledge that the Production Tests are expected to take place at the Contractor's business premises or an approved testing facility in the United Kingdom.
- 5.3 Upon a Production Vehicle passing all necessary Production Tests as witnessed by the Company Project Manager or their nominee, the Company Project Manager shall issue a Production Vehicle Inspection Report to that effect to the Contractor within one (1) Business Day of such Production Vehicle passing its Production Tests.
- 5.4 If after observing the Production Tests for a Production Vehicle, the Company Project Manager reasonably determines that the Production Vehicle or any part does not pass the Production Tests, the Company Project Manager may reject the Production Vehicle or any part by issuing a Production Vehicle Inspection Report stating the grounds upon which the decision is based. Following receipt of any such rejection, the Contractor shall make good or otherwise repair or replace the defective parts and resubmit the same for test or inspection in accordance with this paragraph. All expenses reasonably incurred by the Company in consequence of such re-testing or inspection shall be recoverable by the Company from the Contractor.
- 5.5 No Production Vehicle may be delivered to the PV Delivery Site unless such Production Vehicle has been issued with a Production Vehicle Inspection Report indicating that such Vehicle has successfully passed its Production Tests, as applicable.
- 5.6 Following receipt of the Production Vehicle Inspection Report by the Contractor indicating that the Production Vehicle has successfully passed the Production Tests the Contractor will notify the Company of the delivery date

for such Production Vehicle (which will be no later than thirty (30) days of receipt of a Production Vehicle Inspection Report) and will deliver the Production Vehicle to the Company at the PV Delivery Site on the delivery date.

- 5.7 The Contractor shall maintain written documentation for the life of each Production Vehicle properly demonstrating that the Production Tests have been carried out and successfully passed by each Production Vehicle and will make such documentation available for inspection (with the right to take copies) promptly upon request.
- 5.8 The provisions of this Schedule shall not release the Contractor from any of its obligations under this Contract.
- 1.2 6. In the event of any conflict between the provisions of this Schedule 6 and Clause 7A, the provisions of Clause 7A shall take precedence.

SCHEDULE 7

VEHICLE WARRANTY AND SPARE PARTS WARRANTY

Vehicle Warranty

Vehicle warranty and terms & conditions detailed on the following pages.

Spare Parts Warranty

Spare parts warranty is 1 full year from point of order.



BIR_COMM-969465-
v1-TfLNbFL - Wrightb

SCHEDULE 8

SPARE PARTS ORDERING AND DELIVERY PROCEDURE

Please see the parts ordering procedure on the following pages.

Please note that parts can be ordered as follows:-

- Phone
- Fax
- Email
- Internet / on-line parts ordering.

Parts Ordering Procedure



BIR_COMM-969467-
v1-TfLNBfL - Wrightbi

SCHEDULE 9

STANDARD TERMS OF SALE FOR SPARE PARTS

Wright Customcare. Terms and Conditions of Sale

GENERAL

In the fulfilment of an order these Terms & Conditions shall form the basis of a binding contract between the Seller and the Purchaser. If your official order form contains special printed conditions it is understood that such conditions are only accepted in so far as they are not at variance with these terms and conditions of sale.

PRICES

Whilst we will make every endeavour to adhere to our quoted prices we reserve the right to amend them to those ruling at the date of despatch.

All orders are subject to a minimum order value of £15.00

All prices exclude V.A.T.

DELIVERY

Delivery times are quoted in good faith but no liability is accepted for failure to despatch within the quoted period. Cost of carriage will be as per agreed price list from time to time.

PAYMENT

Payment for goods and services shall be net 30 days from date of invoice unless specifically agreed otherwise.

Overdue payments may be subject to interest at the rate of 2% per month or part thereof.

DESCRIPTION AND DATA

Every effort will be made to ensure the accuracy of technical data or literature relating to the goods but no liability can be accepted by the Seller for any damage or injury arising directly or indirectly from any error or omission in such technical data or literature. All goods and services are supplied on the condition that the Seller shall not be liable for any loss, direct or indirect, caused by anything beyond its reasonable control (including industrial disputes) nor for personal injuries or any consequential loss however caused.

EXCLUSION OF CONDITIONS AND WARRANTIES

In the event of any defect in any of the goods ordered which shall have been manufactured exclusively by the Seller at its own works being disclosed within one year from the date of delivery thereof from such works, and if such goods alleged to be defective be made available to the Seller or its agents or subcontractors within seven days after such alleged defect has become apparent, the Seller undertakes to examine the same and provided in the Seller's opinion such goods have at all been subjected to proper and normal conditions of use and further provided in the Seller's opinion any fault be found to be due exclusively to defective materials or workmanship, then the Seller will repair the defective part or supply free of charge, a new part in place thereof. This warranty is limited to the delivery to the Purchaser of the part or parts in exchange for those acknowledged by the Seller to be defective. In the case of goods which are not of the Seller's manufacture, the Seller shall not be liable for any defect but it shall use its best endeavours to obtain for the Purchaser the benefit of any warranty which may be available to the Seller from its suppliers.

Genuine Wrightbus Ltd. original equipment parts must be fitted to maintain the structural integrity warranty.

CLAIMS AND RETURNS

The Seller guarantees at its discretion to repair or replace free of charge any goods found to its satisfaction to be defective within 12 months of the date of delivery owing to faulty design, materials or workmanship, provided the goods have not been modified or repaired by other than the Seller and have been operated, stored and maintained within the Seller's recommendations for use. In the case of goods not manufactured by the Seller, its liability shall in no circumstances extend beyond the liability to the Seller by the manufacturer of such goods.

Goods returned under this guarantee shall be delivered to the Seller's premises at the purchaser's expense and if found to be defective (or when the defect is attributable to the purchaser's use) will be returned to the purchaser at its expense. In the case of goods repaired by the Seller, the guarantee shall terminate at the end of the original guarantee period.

CANCELLATION

If the Purchaser cancels the goods or services once the order has been processed the Purchaser will be liable for any costs incurred by the Seller.

TITLE

The title of the goods shall pass to the Purchaser only when payment in full has been received by the Seller for all goods whatsoever supplied (and all service rendered) at any time by the Seller to the Purchaser.

LAW APPLICABLE

These conditions and any contract on these conditions shall be subjected to and construed in accordance with the Law of N. Ireland.

SCHEDULE 10

WORKPLACE HARASSMENT POLICY

Company's Policy



Bullying_and_Harass
ment_Policy_and_Pro

Contractor's Policy

BULLYING AND HARASSMENT (DIGNITY AT WORK) POLICY & PROCEDURES

1. INTRODUCTION

As part of its overall commitment to equality of opportunity, this Company recognises that bullying and harassment detracts from a productive working environment and can affect the health, confidence, morale and performance of those affected by it, including anyone who witnesses or knows about the unwanted behaviour. The company therefore undertakes to investigate complaints, quickly, seriously and confidentially.

This policy is intended to define the Company's commitment to create a harmonious working environment where every worker is treated with respect and dignity and in which no worker feels threatened or intimidated within their workplace.

The policy and its associated procedures are necessary to ensure an organisational environment where bullying and harassment will be recognised as totally unacceptable behaviour which may constitute gross misconduct necessitating disciplinary action and which may warrant dismissal.

Individual members of staff who feel they are being subjected to harassment or bullying are advised to progress complaints in accordance with this policy and its associated procedures as they have been specifically devised to ensure sensitive and prompt handling of such issues.

This policy is supported by the T&G section of UNITE.

1.1 HARASSMENT

Harassment is defined as:

"Unwanted conduct, based on a sexual/ sectarian/ racial/ disability/ age / sexual orientation nature or other conduct based on sex, religious belief, political opinion, race, age, sexual orientation or disability which has the purpose or effect of violating the dignity of a person or creating an intimidating, hostile, degrading, humiliating or offensive environment".

Harassment as defined in the legislation will amount to unlawful discrimination. This Company is committed, however, to discouraging all forms of harassment and discrimination, whether unlawful or not.

1.2 Many forms of behaviour can constitute harassment; these are just some examples:

- Physical conduct ranging from touching to serious assault
- Verbal and written harassment through jokes, racist, sexist or sectarian remarks, homophobic comments, comments about a person's disability,

offensive language, gossip and slander, sectarian songs, mobile telephone ring tones, threats, letters, emails

- Visual displays of posters, computer screen savers, downloaded images, graffiti, obscene gestures, flags, bunting or emblems, or any other offensive material
- Coercion, including pressure for sexual favours, pressure to participate in political or religious groups

1.3 Associated legislation that governs harassment includes the following:

Fair Employment & Treatment (NI) Order 1998 (as amended)

Disability Discrimination Act 1995 (as amended)

Race Relations (NI) Order 1997 (as amended)

Sex Discrimination (NI) Order 1976 (as amended)

Employment Equality (Sexual Orientation) Regulations (NI) 2003

Employment Equality Age Regulations (NI) 2006

Protection from Harassment (NI) Order 1997 (This legislation makes harassment both a civil tort and criminal offence).

If any of the above behaviour is not related to an equality ground covered by anti-discrimination legislation, this could amount to bullying.

Other Acts or Orders where bullying or harassment may have an application could include the following:

Health and Safety at Work (NI) Order 1978

Malicious Communications (NI) Order 1988

Public Interest Disclosure (NI) Order 1998

1.4 *BULLYING*

Bullying is defined as:

“The unwanted conduct which has the purpose or effect of violating the dignity of a person or creating an intimidating, hostile, degrading, humiliating or offensive environment”.

The above shall be regarded as having that effect if having regard to all the circumstances, including in particular the complainant’s perception, it should reasonably be considered as having the effect.

Bullying is social identity neutral. Everyone has the potential to bully and it can occur at all levels.

1.5 Many forms of behaviour can constitute bullying and the following are just some examples which may constitute bullying:

- Abusive behaviour/ intimidation/ threats
- Being belittled/ ridiculed/ insulted
- Shouting/ cursing at an individual/ public humiliation

- Different treatment
- Abuse of power or personality
- Isolation or non-co-operation at work, exclusion from social activities
- Intrusion by pestering, spying, following, etc.

2. COMPLAINANTS' RIGHTS

2.1 The company fully recognise the right of employees to complain about bullying or harassment should it occur. It has developed a procedure through which employees can confidentially raise complaints relating to bullying or harassment.

2.2 A complaint under the formal procedure must be made within 3 months of the date when the Complainant first knew of the act which is being complained of or within 6 months of the date when the act occurred, whichever is the sooner.

2.3 The procedure does not replace or detract from the rights of employees to pursue a complaint of harassment under the sex/ race relations/ disability/ sexual orientation/ age discrimination or Protection from Harassment legislation to an Industrial Tribunal and, under the fair employment legislation, for example, to the Fair Employment Tribunal, in the case of sectarian harassment. However, there are strict time limits for making complaints to a tribunal and complainants will be expected to have raised their complaint under an employer's grievance procedures first.

2.4 Every effort will be made to ensure that employees making complaints of harassment or bullying and others who give evidence or information in connection with a complaint will not be victimised. Victimisation constitutes discrimination contrary to following anti-discrimination legislation: Fair Employment & Treatment (NI) Order 1998 (as amended), Disability Discrimination Act 1995 (as amended), Race Relations (NI) Order 1997 (as amended), Sex Discrimination (NI) Order 1976 (as amended), Employment Equality (Sexual Orientation) Regulations (NI) 2003 and Employment Equality Age Regulations (NI) 2006. Any complaint of victimisation will be dealt with promptly, seriously and in complete confidence. Victimisation will result in disciplinary action and may warrant dismissal.

3. ROLE OF EMPLOYEES

3.1 All those who work for this organisation have a responsibility to help ensure a working environment in which the dignity of all employees, clients and customers is respected. Everyone must comply with this policy and employees should ensure that their behaviour could not be considered in any way to be bullying or harassment.

3.2 All employees must alert management to any incident of harassment/ bullying to enable the Company to deal with the matter in line with the policy and procedure. They should discourage bullying and harassment by making it clear that they find such behaviour unacceptable and they should provide support to colleagues who are being bullied or harassed, by encouraging them to follow the agreed complaints procedure.

3.3 Employees have the right not to be bullied or harassed and should not feel, or be made to feel, guilty or embarrassed about exercising these rights. The test for an employee in deciding whether or not to raise particular behaviour as an issue of

concern is whether or not the particular behaviour meets any of the criteria set out in Section 1.

3.4 Employees are entitled to raise their concerns or issues of this type secure in the knowledge that the Company takes allegations of harassment/ bullying seriously and will deal with them quickly and sympathetically.

4. ROLE AND RESPONSIBILITIES OF MANAGERS

4.1 Managers and Supervisors, as do all employees, have a responsibility to ensure that they comply with this policy at all times.

4.2 Managers and Supervisors have a duty to implement and maintain this policy and to make every effort to ensure that bullying/ harassment does not occur, particularly in work areas for which they are responsible.

4.3 Managers and Supervisors have the responsibility for dealing appropriately with any incident of bullying or harassment that they are aware of. If harassment or bullying does occur, they must deal effectively with the situation and inform the Human Resources Manager immediately of the incident/s.

4.4 Managers and Supervisors must be responsive and supportive to any member of staff who makes an allegation of harassment or bullying, provide clear advice on the procedure to be adopted, maintain confidentiality and seek to ensure that there is no further problem of harassment, bullying or victimisation while a complaint is being dealt with or after it has been resolved.

4.5 Managers and Supervisors must be alert and proactive to unacceptable behaviour and take appropriate action in accordance with company policy and procedures. They must ensure that potentially offensive material of a discriminatory nature is not displayed or circulated.

5. THE ROLE OF THE COMPANY

5.1 The Company will ensure that adequate resources are made available to promote respect and dignity in the workplace and to deal effectively with complaints of harassment or bullying.

5.2 The Company will ensure that the policy and the procedures for dealing with complaints will be communicated effectively to all employees and ensure that they are aware of what their responsibilities are in relation to bullying or harassment within the workplace and what the procedure is for dealing with harassment or bullying in the workplace.

5.3 Where necessary, Managers, Supervisors, Human Resources staff and designated advisors will receive appropriate training in the implementation of this policy and associated procedures in order for them to perform their role effectively.

5.4 The Company have designated staff from Personnel & Training Services to provide advice and assistance to employees subjected to harassment or bullying. The names of individuals who have been designated as advisors will be made known to all employees.

5.5 Employees wishing to use the services of a designated advisor may contact Alan Ferguson, Wilma Buick, Sophie Irwin, Gary Jackson, Lisa Doherty or Helen Etherson members of staff at Personnel & Training Services Tel. (028 25 644110).

6. PROCEDURE FOR MAKING COMPLAINTS

6.1 THE INFORMAL STAGE

There are several steps employees can take to deal with bullying or harassment when they are subject to it. For example: -

6.1.1 Employees may wish to try and deal with the situation in the first instance by making it clear to the perpetrator that the behaviour is unacceptable. In this approach they are entitled to draw on the confidential advice, assistance and support of a work colleague, Manager, Supervisor, a member of the HR team or a designated advisor from Personnel & Training Services who will help with any attempt to solve the problem without resort to formal procedure.

6.1.2 Employees who are being bullied or harassed are entitled to:

- Approach the alleged perpetrator directly, making it clear to the person(s) harassing or bullying him/ her that the behaviour in question is offensive and should be stopped. This can be done either verbally or in writing.
- Approach the alleged perpetrator with the support of a work colleague or a Trade union representative.
- Approach the alleged perpetrator with the support of a Manager, Supervisor, a member of the HR team or a designated advisor.

6.1.3 Where an employee seeks support of a work colleague or Trade Union representative the following is recommended:

- Where a work colleague or Trade Union representative is approached to support an employee who is being harassed it is strongly recommended that a record is maintained of any approaches under the informal procedure and of all actions taken and why.

6.1.4 Where an employee seeks support of a Manager, Supervisor, a member of the HR team or a designated advisor he/she will be informed that their role at the informal stage can only be one of support and assistance. The employee will also be advised of his/ her statutory rights and that:

- A formal investigation and possible disciplinary action can only take place if the complaint is investigated under the formal procedure.
- All reported incidents of harassment/ bullying will be monitored and, in the event of any patterns emerging, management may wish to initiate its own formal investigation
- A written record of the action taken will be made to assist with any formal proceedings that may arise if the behaviour does not stop.

Failure to maintain such a record will not invalidate proceedings at the formal stage.

6.2 THE FORMAL STAGE

6.2.1 The Company recognises that in some instances employees who are the victims of harassment or bullying may not be self – confident enough to tell the perpetrator that the behaviour is unacceptable. It would emphasise that employees are not required to approach the perpetrator in an attempt to get the behaviour corrected and are entitled to progress the complaint through the formal procedure if they so wish.

6.2.2 The formal complaints procedure may also be used if the harassment or bullying continues after the informal procedures have been unsuccessful in reaching a satisfactory resolution.

6.2.3 A designated advisor from Personnel & Training Services, will undertake investigations at the formal stage on behalf of the Company. Individuals may raise complaints directly with any of the staff named in Section 5.5 or with a representative from the Company Human Resources Department.

6.2.4 Any member of management that may be involved in the carrying out of investigations at the formal stage will be in no way connected with the allegation that has been made.

6.2.5 Personnel & Training Services will provide a staff member to investigate allegations throughout the procedure. He/She will attend all meetings to act as an external advisor and a written record of all proceedings will be maintained.

6.2.6 While it is preferable that a complaint should be made in writing (in accordance with step 1 of the statutory grievance procedure) to any of the individuals in section 5.5, this will not preclude the investigation of a complaint made verbally at first and then confirmed in a written form.

6.2.7 The designated advisor from Personnel & Training Services will acknowledge receipt of the complaint and arrange to meet the Complainant within 3 working days.

6.2.8 During all initial meetings both the Complainant and alleged perpetrator have the right to be accompanied by a work colleague or their trade union representative.

6.2.9 The following procedure details time limits for the completion of each stage of the procedure. If any of these time limits are not possible then both parties will be informed of the revised timescale.

7. PROCEDURE FOR HANDLING COMPLAINTS

7.1 INITIAL STEPS

7.1.1 Initial meeting with the Complainant

On receipt of a complaint, the representative from Personnel and Training Services shall meet with the Complainant and carry out the following actions:

Clarifying and formally recording the nature of the complaint and informing the Complainant that it is being handled under the formal procedure.

Advising the Complainant of his/her statutory rights and the time limits under appropriate legislation.

Ensuring that the Complainant is aware of the next stage of the formal procedure.

7.1.2 Avoiding contact between Complainant and Alleged Perpetrator

The Company will ensure that the issue of avoiding contact between the Complainant and the alleged perpetrator is resolved before action is taken to inform the alleged perpetrator of the complaint.

In the case of serious harassment the Company will give consideration to the use of precautionary suspension, on full pay, of the alleged perpetrator to enable investigations to proceed smoothly.

Where such a decision is reached, the individual will be formally advised during the initial meeting with the representative from Personnel & Training Services.

In other cases of alleged harassment or bullying the Company will take appropriate action to avoid contact between the Complainant and the alleged perpetrator, after the initial meeting with the Complainant.

7.1.3 Informing the Alleged Perpetrator

Personnel & Training Service's representative/s Personnel will meet with the alleged perpetrator and will carry out the following actions:

- 1) Detailing the nature of the complaint
- 2) Confirming that the complaint is being handled under the formal procedure
- 3) Ensuring that the individual is aware of the next stage of the procedure
- 4) Inform the alleged perpetrator if precautionary suspension on full pay is to be invoked to enable investigations to proceed.

7.2 INVESTIGATION

7.2.1 General Principles

- a) The Company, through their appointed advisors undertake to carry out a rigorous investigation into any allegations in order to establish all of the facts necessary to enable a balanced decision regarding any use of the Disciplinary Procedure to be reached.
- b) Employees shall have been made fully aware, in writing of any allegation of harassment or bullying and shall be given every opportunity to answer any questions during the investigation.
- c) During all meetings/ interviews both the Complainant and alleged perpetrator have the right to be accompanied by another employee, or their Trade Union representative.

- d) Employees who have been disciplined as an outcome of a complaint of harassment have the right to appeal the disciplinary decision in accordance with the Company's appeals procedure.
- e) Employees who have been disciplined as an outcome of a complaint of harassment or bullying do not have recourse to the Company's Grievance Procedure.
- f) Any investigation will be carried out as quickly as possible; however the meetings may not necessarily follow immediately after each other. Every effort will be made to hold all necessary meetings within 10 working days of the date of receipt of the complaint. Where this proves to be impracticable both the Complainant and alleged perpetrator will be advised.
- g) The Company recognise the fact that employees have the right to complain to the Office of Industrial Tribunals and the Fair Employment Tribunals about alleged incident/s.
- h) All information or evidence provided will be treated as confidential to the investigation, subject to any statutory requirements.

7.2.2 MEETING WITH THE COMPLAINANT

The Company's appointed advisors will meet with the Complainant and consider what he/she has to say about the alleged incident/s. Where possible dates, times and the names of any witnesses or other employees who may be able to assist with the investigation, will be gathered. The Company's appointed advisors will also consider any written information that the Complainant wishes to provide in support of their allegation.

7.2.3 MEETING WITH THE ALLEGED PERPETRATOR

The Company's appointed advisors will meet with the alleged perpetrator and consider what he/she has to say about the allegations. Where possible names of witnesses, or other employees, who may be able to assist the investigation will be gathered. The Company's appointed advisors will also consider any written information that the alleged perpetrator wishes to provide in support of their position.

7.2.4 MEETING WITH OTHERS WHO CAN ASSIST THE INVESTIGATION

The Company's appointed advisors will meet with any other person/s where it is believed that such individuals can assist with the investigation. Separate interviews will be conducted and individuals asked to outline their observations and/ or give a description of any events that may be relevant. All those who give information will do so privately and will not be in the presence of anyone involved in or present during the alleged incident/s.

7.2.5 MEETING WITH MANAGERS

The Company's appointed advisors will meet with the manager of both the Complainant and the alleged perpetrator to establish if there has been any history of previous conflict between them and/ or with other parties.

7.3 CONSIDERATIONS AND REPORTING

7.3.1 Having collected all the relevant information from the meetings, the Company's appointed advisors will then prepare a written report outlining the facts, indicating their findings, and whether a case of harassment or bullying is substantiated. This

report will be forwarded to the relevant Director and to any other relevant member/s of Management for a decision on any appropriate management or disciplinary action.

7.4 DISCIPLINARY ACTION

7.4.1 The Director and any other relevant member/s of Management will consider the facts contained in the report and will decide either to:

- a. Initiate the Company's disciplinary procedure against any party as appropriate; and or
- b. Take any other appropriate management action. E.g. the provision of training

7.4.2 Following the Company's decision on any action to be taken, the Company's appointed advisor will write to both the person who has complained of bullying/harassment and the person against whom the complaint was made informing them of the decision and of any action which the Company propose to take. Every effort will be made to have completed the procedure within 15 working days of the complaint being received. Where this proves impracticable both parties will be informed of any revised timescale.

7.4.3 If there is a finding of harassment/ bullying and disciplinary action against the perpetrator is warranted under the organisation's disciplinary policy, the statutory disciplinary and dismissal procedures need to be put into effect along with the statutory appeal steps if necessary.

7.4.4. If the complainant is not satisfied with the outcome of the investigation and subsequent action taken, they have the right to appeal the decision made.

7.5 OTHER ACTION

7.5.1 REDEPLOYMENT WHERE DISCIPLINARY ACTION IS TAKEN

Where a complaint has been upheld the Company recognise that the Complainant may wish to avoid further contact with the perpetrator. Where the perpetrator remains in employment with the Company, and where it is evident that further contact between the individuals concerned would be unacceptable, every effort will be made to facilitate redeployment. In the first instance consideration will be given to redeployment of the perpetrator and where a transfer of the Complainant occurs it will not lead to any disadvantages to him/ her.

7.5.2 REDEPLOYMENT WHERE DISCIPLINARY ACTION IS NOT TAKEN

In such cases consideration may still be given, where practicable to the voluntary transfer of one of the employees concerned.

7.5.3 FOLLOW UP MONITORING

The advisor from Personnel & Training Services who conducted the investigation will meet with the individual who has alleged harassment/ bullying on a fortnightly basis for two months following the investigation to ensure that no further harassment, bullying or victimisation has occurred. This action will be undertaken even where a complaint has not been upheld.

7.5.4 EQUAL OPPORTUNITIES AWARENESS TRAINING

The Company will ensure that the perpetrator is made aware of the Company's policies on equal opportunities, harassment and bullying and of the law relating to these matters.

7.5.5 EMPLOYEE ASSISTANCE PROGRAMS

The Company recognises that prior to, during and post claims of harassment and bullying a great amount of stress can be suffered by the Complainant and the alleged perpetrator. The company provides various forms of Employee Assistance Programs (outlined in 15.8 of the Company handbook) in order to help with the management and alleviation of stress or stress related symptoms.

SCHEDULE 11

BACKGROUND INTELLECTUAL PROPERTY

1. The Company's Background Intellectual Property Rights

1.1 Specification.

1.2 Rights in the designs and copyrights and any other intellectual property rights created during the design competition.

1.3 Company Marks.

2. The Contractor's Background Intellectual Property

NON-DISCLOSEABLE BACKGROUND INTELLECTUAL PROPERTY

2.1 The "Alumique" structure and the programming and logic behind the Wrightbus driveline and the composite materials technology proprietary to Wrightbus.

SCHEDULE 12

PROCEDURE COVERING VARIATIONS FROM CONTRACT

1. Change Control Procedure

1.1 The Company may at any time require, and the Contractor may at any time recommend, a change in accordance with the process described in this Schedule 12.

1.2 Should the Company require, or the Contractor wish to recommend, a change then that Party's representative (which for the purpose of this Schedule 12 will be the Company Project Manager for the Company, and will be the Contractor's Representative for the Contractor) shall submit a brief written paper following the format of the template proposed change paper set out in Annex 1 to this Schedule 12 (the "**Proposed Change Paper**") to the other Party addressing, as a minimum, the following points:

1.2.1 the title of the proposed change and a unique reference number;

1.2.2 the originator and date of the proposal for the proposed change;

1.2.3 the reason for the proposed change;

1.2.4 full details of the proposed change;

1.2.5 the reasonable price, if any, of the proposed change based on the agreed list of rates set out in Schedule 4 (in the case of changes raised by the Contractor) (AND/OR) the relevant costs recorded in accordance with Clause 4A.4;

1.2.6 a reasonable timetable for implementation, together with any proposals for acceptance of the change; and

1.2.7 in the case of changes raised by the Contractor, details of the likely impact, if any, of any reasonable changes required to any other aspects of the Contract, including:

1.2.7.1 the term of the Contract;

1.2.7.2 any sub-contracts;

1.2.7.3 the Company's obligations;

- 1.2.7.4 the price;
- 1.2.7.5 the payment profile;
- 1.2.7.6 timescales for delivery and production;
- 1.2.7.7 the performance of the Vehicles;
- 1.2.7.8 the Specification;
- 1.2.7.9 health and safety issues;
- 1.2.7.10 Intellectual Property Rights; and/or
- 1.2.7.11 any other term of the Contract.

1.3 Within ten (10) Business Days of the submission of a Proposed Change Paper (or such other period as may be agreed between the Parties) the receiving Party's representative or his nominee shall, acting reasonably, respond to the Proposed Change Paper in writing and, if appropriate, the Parties' representatives or their nominees shall meet to discuss the Proposed Change Paper. Where a change is required by the Company, the Contractor's Representative shall, when responding to the Proposed Change Paper submitted by the Company, acting reasonably, update the Proposed Change Paper so that it includes the information identified at paragraphs 1.2.5 and 1.2.7 above (to the extent relevant).

1.4 Upon receipt of the Contractor's Proposed Change Paper or the Contractor's response to the Company's Proposed Change Paper ("**PCP Response**"), the Company may elect to:

1.4.1 accept the variation as detailed in the Contractor's Proposed Change Paper or the PCP Response, as applicable, in which case the Parties shall record the variation by way of a change control note signed by both Parties in the format set out in Annex 2 to this Schedule 12 ("**CCN**") and the Contract will be deemed varied accordingly; or

1.4.2 request amendments to the Contractor's Proposed Change Paper or the PCP Response with the Contractor in which case the Contractor will promptly re-submit an amended Proposed Change Paper or the PCP Response to the Company in accordance with the Company's request and the Company will be entitled to make elections in relation

to the amended Proposed Change Paper or the PCP Response in accordance with this paragraph 1.4; or

1.4.3 reject the Contractor's Proposed Change Paper or the PCP Response, as applicable, in which case the Contract will continue in force unchanged.

1.5 Each CCN shall be uniquely identified by a sequential number (referred to as a variation number).

1.6 Two copies of each CCN shall be signed by the Contractor and submitted to the Company in accordance with the provisions of Clause 42 (Notices) not less than ten (10) Business Days (or such other period as may be agreed between the Parties) prior to the effective date of the CCN.

1.7 Subject to the Company continuing to accept the variation, the Company shall sign both copies of the CCN within five (5) Business Days (or such other period as may be agreed between the Parties) of receipt by the Company. Following signature by the Company, one copy of the signed CCN shall be returned to the Contractor by the Company.

1.8 A CCN signed by a duly authorised representative of each Party shall constitute an agreed variation to this Contract.

2. **General**

2.1 Any discussions, negotiations or other communications which may take place between the Company and the Contractor in connection with any proposed change to this Contract, including the submission of any written communications, prior to the signing by both Parties of the relevant CCN, shall be without prejudice to the rights of either Party.

2.2 Any work undertaken in connection with any proposed change to this Contract by the Contractor, its permitted sub-contractors or agents shall be undertaken at the expense and liability of the Contractor.

3. **Cost Efficiencies**

3.1 Where a completed CCN is to result in a reduction in the cost of producing the vehicles whether through changes in design, components, production processes or otherwise), the value of that reduction, less any costs incurred by either Party to implement it each as identified in the relevant CCN, shall

be shared equally between the Parties by way of payment by the Contractor to the Company or, if agreed, by reduction in the price of the Vehicles.

4 **Payment**

- 4.1 Where a CCN will result in an increase on the price of the Vehicles, the increase shall be paid by way of an increase in the price of each Vehicle to which the change applies, save that the Parties may agree an alternative mechanism for payment such as a lump sum; the mechanism for payment shall be set out in the CCN.

Annex 1: Proposed Change Paper



Proposed Change Paper

Contract for the Design and Supply and Maintenance of a Double Decker Bus Contract

PRO number:	
PCP number (provided by the Company):	
Version number:	
Date raised:	

Title of change:	
Originator (name and company):	
Reason for request for change:	
Update to Specification required?	Yes/No (delete as appropriate)
Update to price required?	Yes/No (delete as appropriate)

Date of response:	
Response provided by:	
Response to request for change:	

NB: This is not a valid contractual document and no work can be carried out based on a signed PCP. This document is to be viewed as a recommendation for change with agreed indicative scope, timeframe and costs.



Proposed Change Paper

Contract for the Design and Supply and Maintenance of a Double Decker Bus Contract

Cost estimate:	
Delivery schedule:	

Date of response:	
Response provided by:	
Response:	
Cost estimate:	
Delivery schedule:	

Authorised on behalf of the Company by:	
Signature:	
Date:	

Authorised on behalf of the Contractor by:	
Signature:	
Date:	

NB: This is not a valid contractual document and no work can be carried out based on a signed PCP. This document is to be viewed as a recommendation for change with agreed indicative scope, timeframe and costs.

Annex 2: Contract Change Note



Contract Change Note

Contract for the Design and Supply and Maintenance of a Double Decker Bus Contract

PRO number:	
CCN number (provided by the Company):	
PCP number:	
Version number:	
Date raised:	

Title of change:	
Originator (name and company):	
Reason for request for change: 	
Solution: 	
Impact: 	

All defined terms in the Contract shall, unless expressed to the contrary herein or the context otherwise requires, continue to have the same meanings where used in this CCN. This CCN shall be read in conjunction with the Contract, all terms and conditions of which shall continue to have full force and effect, except to the extent as varied by this CCN.



Contract Change Note

Contract for the Design and Supply and Maintenance of a Double Decker Bus Contract

Cost of change and payment profile (if an increase):	
Cost of implementation and drawings (if a decrease):	
Mechanism for payment:	
Delivery schedule:	
Update to Specification required?	Yes/No (delete as appropriate)
Update to price required?	Yes/No (delete as appropriate)
Change owner after signature (Company):	
Change owner after signature (Contractor):	

Authorised on behalf of the Company by:	
Signature:	
Date:	

Authorised on behalf of the Company by:	
Signature:	
Date:	

Authorised on behalf of the Contractor by:	
Signature:	
Date:	



Contract Change Note

Contract for the Design and Supply and Maintenance of a Double Decker Bus Contract

All defined terms in the Contract shall, unless expressed to the contrary herein or the context otherwise requires, continue to have the same meanings where used in this CCN. This CCN shall be read in conjunction with the Contract, all terms and conditions of which shall continue to have full force and effect, except to the extent as varied by this CCN.

SCHEDULE 13

RESPONSIBLE PROCUREMENT AND STRATEGIC LABOUR NEEDS AND TRAINING

1. Responsible Procurement

1.1 The Contractor acknowledges the requirements of the Responsible Procurement Policy in the performance of its obligations under this Contract.

1.2 The Contractor shall provide such co-operation and assistance as may be reasonably requested by the Company in relation to the Responsible Procurement Policy.

1.3 The Contractor shall wherever applicable undertake its obligations in accordance with the appropriate Gold Standard Tool pursuant to the Diversity Works for London toolkit, details of which are at www.diversityworksforlondon.com.

1.4 The Contractor shall ensure that all products it sources and supplies in accordance with this Contract comply fully with the Company's ethical sourcing policy details of which can be found at:

<http://www.london.gov.uk/rp/>

<http://www.greenprocurementcode.co.uk>.

1.5 It is the Company's policy to utilise, where it considers it appropriate and on a non-exclusive basis, CompeteFor as a fair and economic method of sourcing suppliers to provide goods, works and services. Where the Contractor intends to undertake a tender exercise in order to sub-contract work with a value above £50,000 per contract the Contractor shall use, on a non-exclusive basis, CompeteFor (www.competefor.com) for the purpose of advertising sub-contracts and shortlisting suppliers.

2. Strategic Labour Needs and Training

The Contractor has implemented, and will at all times comply with the terms of, its Mission Statement, Equal Opportunities Policy, Training and Development Policy and Learning and Development Procedure as attached to this Schedule.

MISSION STATEMENT

General

As a Company we aim to build profitably the highest quality bus sold in Britain. We want to achieve the maximum possible customer satisfaction and ensure the prosperity of the Company and its employees.

To assist in this, we aim to achieve mutual trust and co-operation between all employees within the Company and make The Wright Group a place where long term satisfaction can be achieved. We recognise that people are our most important resource and in line with spirit, believe that the following principles will be of value to all.

A. People

We will develop and expand the contributions of all employees by strongly emphasising training and by the expansion of everyone's capabilities.

We will seek to delegate and involve employees in the discussion and decision making process, particularly in those areas in which each of us can effectively contribute so that all may participate in the efficient operation of the Company.

B. Teamworking

We recognise that all employees have a valued contribution to make as individuals, but in addition believe that this contribution can be most effective within a teamworking environment. Our aim is to build a Company with which employees can identify and to which all have commitment.

C. Communication

Within the bounds of commercial confidentiality we will encourage open channels of communication. We aim to ensure that all employees know what is happening within the Company, particularly with reference to performance, and forward plans. Our aim is to foster an environment in which information and views flow freely upwards, downwards and across the Company.

D. Objectives

We will agree clear and achievable objectives and provide meaningful feedback on performance.

E. Flexibility

We will not be restricted by the existing way of doing things. We will continuously seek improvements in all our actions.

These are tough targets and we aim high. With hard work and goodwill we can get there.

Mark Nodder

Managing Director – The Wright Group

EQUAL OPPORTUNITIES POLICY

1.1 Equal Opportunities Policy Statement

We are an Equal Opportunities Employer, committed to ensuring that the talents and resources of all our employees are utilised to the full. We will not discriminate unfairly against any individual in matters of recruitment or selection for any position, promotion, development or training on the grounds of perceived religious or political affiliation, sex, marital status, disability, colour, race or ethnic origins.

1.2 POLICY

To achieve our objective the Company will pursue the following policy :-

1.2.1 The Company will recognise and ensure compliance with its legal obligations under the Fair Employment and Treatment (NI) Order 1998, the Sex Discrimination (NI) Order 1976 the Disability Discrimination Act 1995, the Race Relation (NI) Order 1997 and any other appropriate legislation.

1.2.2 In addition to the above the Company will recognise its moral and social obligations to promote equality of opportunity within the community in which it operates.

1.2.3 The Company has established recruitment and selection policies and procedures designed to promote equality of opportunity. These will be periodically reviewed to ensure that individuals continue to be selected, promoted or treated ***solely on the basis of merit***.

Consequently the following practices will be applied:-

- Job descriptions and personnel specifications will be used for each post in question.
- All vacancies will be advertised as widely as possible.
- Any advertisement for a vacancy in the Company will clearly define main duties and necessary requirements for the post.
- All applicants will be required to complete an application form which will be accompanied by a request for a voluntary statement of community background for the collection of equal opportunity data. This monitoring form will be included with the formal application but will be retained separately and will not be used as the basis for any employment decision.
- Short-listing for interviews will be based upon job related criteria. Where appropriate job related tests will be used.
- Written assessments will be made on each individual interviewed and reasons for acceptance or rejection recorded.

1.2.4 Commit itself to keep under review the operation of this Equal Opportunities Policy to take account of changing circumstances.

- 1.2.5** Adopt appropriate affirmative action measures including the setting of goals and timetables to ensure the provision of equality of opportunity, and fair participation of both Catholic and Protestant members of the community in the organisation.
- 1.2.6** Carry out the statutory periodic review of employment procedures and practices as specified in Section 31 of the 1989 Act.
- 1.2.7** The Company will consult with the Transport & General Workers Union and/or employee representatives about procedures required to make this policy effective.
- 1.2.8** The Company provides facilities for any employee who believes that they have been treated unfairly within the scope of this policy to raise the matter through the Company Harassment Procedure.
- 1.2.9** This policy will be publicised throughout the Company and elsewhere as is from to time appropriate.

1.3 RESPONSIBILITIES

- 1.3.1.** In general all employees have a responsibility to comply with this policy to ensure equality of opportunity for all.
- 1.3.2.** Specific responsibilities fall on, Managers, and staff professionally involved in recruitment, employee administration and training who are responsible for ensuring that this policy is implemented, and for dealing with any matters arising.

Where appropriate, such matters should be passed to :

The Human Resources Manager

who will be responsible for the provision of advice, training, setting guidelines for policy implementation and operation and for any review of effectiveness.

- 1.3.3.** The Company does not permit the display of flags, emblems, posters or other similar material, or the circulation of literature or the deliberate articulation of slogans or songs which may give offence or cause apprehension amongst particular groups of employees. Any attempt to display such will be regarded as Major Misconduct and will result in disciplinary action.

1.4 FAILURE TO COMPLY

Failure to comply with the Policy will be regarded as Misconduct which may lead to disciplinary action.

Signed : **Mark Nodder**

Position : Managing Director – The Wright Group

Date Revised : 1st November 2006

TRAINING AND DEVELOPMENT POLICY

The Company is committed to the development of a strong and effective team and aims to achieve this by maximising the potential of each employee by translating corporate plans into complementary programmes for the development of staff at all levels.

The Human Resources Manager is responsible for the identification and provision of education and training requirements for all Company personnel. This includes on-the-job training where appropriate.

3.1. The objective of the development policy is to improve the financial performance and long term growth of the Company by ensuring the following points are considered: -

- (a)** Improving the performance of staff by ensuring that they are clearly informed and trained in their duties and responsibilities, and by agreeing with them specific key objectives against which their performance will be judged.
- (b)** Identifying staff with further potential and ensuring that they receive the required development, training and experience to equip them for more senior posts within the Company or its subsidiaries.
- (c)** Preparing and maintaining up to date training records for each employee, and to review any training requirements and records as part of specific Management Meetings.

3.2. In all aspects of training and development policy the needs of the business will be paramount. Systems for the identification of any training and development needs, and the subsequent training programme will be maintained and co-ordinated by Senior Management.

3.3. The Company may require employees to undertake specific training, not identified through the formal systems, but which is considered important to the future success of the business.

3.4. All training and development must be approved by Senior Management before being undertaken.

- (a)** The Company will meet the cost of training and development, which has been identified through formal company procedures. These cost may include time off with pay to attend training, any associated fees, accommodation and travel and incidental expenses where applicable.
- (b)** Where employees attend academic courses, which require attendance during normal working hours and evenings. "Time off with pay" (section 3.4 (a) above) applies to normal working hours only. Employees who are required to attend training outside normal working hours will not receive payment for that portion of the course.

3.5. All employees will: -

- (a)** Receive induction training, proper instruction and basic training to enable them to settle into their new environment and reach the required standards as quickly as possible, such training will include a briefing on the Quality System.
- (b)** Receive training where promotion or transfer is involved.

3.6. Where the Company have not identified the training, and an employee identifies a training and development opportunity which they believe will be of value to them in the performance of their duties, the employee may forward details to Senior Management for consideration.

(a) Where such training is approved by Management, and the employee is granted time off with pay for their period of attendance during normal working hours, the employee will be required to work extra hours equivalent to the time off with pay granted by the Company.

(b) In all matters concerned with training and development, the Company will use the following criteria in considering if approval is to be given: -

The needs of the business

Operational requirements

Relevance to the post holder's duties

Training identified through the appraisal system

Any training and development budget

Level 2 Procedure	Reference QP18	Rev 2	Page 204 of 248	Date 17 th December 2008
Title: Learning & Development				

1.0 **PURPOSE**

To identify training needs for all employees so that the following criteria are met :-

- Individuals are competent and quality conscious.
- Capable of meeting established performance standards.
- To ensure the business objectives are met and the company remains profitable for the long-term.
- Aware of their responsibilities in terms of safety critical operations, critical processes, build instructions and best practices for the products on which they are working. This may also include their responsibilities in terms of legal requirements such as Public Service Vehicles (Conditions Of Fitness, Equipment, Use and Certification) Regulations 1981, the Disability Discrimination Act (DDA) 2005, Federal Motor Vehicle Safety Standards and the European Bus Directive 2001/85/EC.

2.0 **SCOPE**

This procedure applies to all hourly paid and staff employees in all direct, indirect and overhead functions across the whole of The Wright Group. It fully supports the Company's Learning and Development Policy.

3.0 **RESPONSIBILITIES**

3.1 **Human Resources Development Manager**

Responsible for ensuring all aspects of this procedure are adhered to across the Company.

3.2 **Apprentice Co-Ordinator**

Responsible for ensuring all aspects of this procedure are adhered to in respect of trainees on the apprenticeship scheme.

3.3 **Learning & Development Co-Ordinator**

Responsible for ensuring all aspects of this procedure are adhered to across the company.

3.4 **Departmental Directors/Managers/Coordinators/Supervisors**

3.4.1 Responsible for completing training needs analysis for their respective areas, and ensuring all employees receive the appropriate training to be effective in carrying out their jobs to the highest possible standard.

3.4.2 Responsible for completing relevant training records and ensuring that the training is evaluated to the appropriate standard. They shall submit the information to HR immediately following any training activity.

3.4.3 To ensure all performance appraisals and personal development plans are set for their respective employees.

3.4.4 To ensure Versatility/Skills Matrices are retained for their respective employees and updated on a timely basis.

4 METHOD

4.1 Training Records

Details of the qualifications and previous experience of employees shall be kept within their personnel file via means of an application form. All training shall be captured on an Internal Training form (QCD251) and assessed by using a Training Evaluation Questionnaire form (QCD252). Where appropriate, the knowledge gained may be tested through N-Volve. All records shall be kept on file.

4.1.1 Hourly Paid Employees

Details of skills acquired by hourly paid employees shall be recorded on the Skills/Versatility Matrix. This shall be updated as and when required by the appropriate Department Manager/Supervisor who will send a copy to HR for filing.

All new starts will receive induction delivered by the training facilitator and appropriate on the job training by the Cell Coach. This training will be captured and assessed by the training facilitator and evaluated to measure impact. All assessment forms will be retained on file.

4.1.2 Staff Employees

Any new training or qualifications will be recorded, updated and retained on file.

All staff will receive an appropriate induction to ensure they are properly and effectively equipped to carry out their job. Copies of their induction plans must be compiled by their manager and sent to HR to retain on file.

4.1.3 Apprenticeships

A training and education plan for each apprentice shall be recorded and retained on file. As progression is made through the plan, the records shall be updated as appropriate.

4.2 Training Providers

Employee training may be carried out by suitably trained instructors, e.g., Departmental Managers, Supervisors, Coaches, Experienced employees, External Training Organisations.

Training providers shall issue a Training Evaluation Form at the end of each training session for feedback on the training and ensure completion by all training attendees before conclusion of the training session. These Training Feedback Forms shall be submitted to the HR Department along with the internal training form capturing who attended the training. Also training will further be evaluated by the use of N-Volve where appropriate which tests knowledge gained on the course.

4.3 On-The-Job Training

4.3.1 Hourly Paid Employees

Upon completion of each employee's training in any given skill, the Department Manager/Team Leader/Supervisor/Learning & Development Facilitator shall evaluate the training and raise a training assessment form indicating that the employee has reached an acceptable quality standard. The form shall then be submitted to the HR Department, who shall update the employees training record.

The Department Manager/Team Leader/Supervisor shall review all details of skills acquired by hourly paid employees on a timely basis ensuring that updates are

recorded on the appropriate Skills/Versatility Matrix and communicated to HR to be retained on file.

The Learning & Development Facilitators shall hold a review meeting on a 6-monthly basis with the Department Manager/Supervisor to ensure that the appropriate Skills Matrix and training records are updated.

4.3.2 Staff Employees

When training is complete, the appropriate Departmental Manager or organiser of the training shall notify the Learning & Development Coordinator using the Internal Training form (QCD251) or other appropriate evidence. The L&D Coordinator shall then update the employee's training record. Evaluation forms shall also be submitted for any L&D activity.

The Learning & Development Coordinator shall hold a review meeting on a monthly basis with the Department Manager/Director to ensure that the appropriate Skills Matrix and training records are captured updated and evaluated to the appropriate standard.

4.3.3 Apprentices

A Training Mentor (Buddy) will be assigned to each apprentice when they are placed in a work area. Upon completion of each apprentice's training in any given area, the Training Mentor shall evaluate the training in the Apprenticeship Passport (QCD255) indicating the apprentices experience in the given area.

4.4 Off-The-Job Training

4.4.1 Hourly Paid and Staff Employees

Employees off-the-job training shall be recorded by means of an attendance record or other documentation as provided by the training provider/external training organisation. Details of the training shall be forwarded to the L&D Coordinator who shall update the employees training record.

4.4.2 Training By External Organisations

To request further and higher education, employees shall submit a Further and Higher Education Request Form to be approved by the departmental Director and sent to HR to retain on file. See separate procedure on Further and Higher Education.

4.5 Training Needs

Training needs shall be identified by a training needs analysis, which shall be completed as required to meet the needs of the business. As a result of the training needs analysis, an overall training plan shall be established. The overall BITP will be written following guidelines laid down by INI to ensure funding. All training activity will have measured objectives and these must be set by each departmental manager/director and evaluated on an annual basis.

SCHEDULE 14

MAINTENANCE AND SUPPORT SERVICES

1.0 Specification for the provision of Vehicle Maintenance Support Services (VMSS)

Vehicle Maintenance and Support Services are based on the operating requirements and assumptions detailed below and the price details are set out in Schedule 4.

2.0 Scope

Contract term: 5 or 7 years from date into service.

Vehicle: NBfL

Contract Mileage: 56,000 miles per Vehicle per year

Application: 40 Vehicles operating from one location

Payment Terms: Monthly payments, monthly in arrears e.g. April's payment paid in May.

3.0 Inclusions

1. 28 day safety inspection to statutory annual test standards, remedial work arising including parts and labour.
2. An additional 14 day check can be included as an option.
3. Routine servicing to the manufacturer's schedule including parts and labour.
4. Specialist sub contract support e.g. AC systems
5. Inspection and preparation for annual MOT test including parts and labour.
6. Rectification work arising from annual MOT failure.
7. Replacement of failed/worn parts where failure is due to fair wear and tear or internal breakdown.
8. Rectification of driver defect reports associated with parts or equipment covered by the Contract.
9. Roadside assistance associated with parts or equipment covered by the Contract.
10. Vehicle recovery or its costs resulting from failure of parts or equipment covered by the Contract.

11. Maintenance of Vehicle service records.
12. Management of contractors, technicians or agents on site.
13. Provision of special tooling, diagnostic equipment and software including updates.

4.0 Exclusions

1. Damage resulting from accident, vandalism, abuse, neglect, misuse, theft and events beyond the control of the Contractor or Vehicle Operator.
2. Replacement of parts deemed to have failed due to abuse or neglect, neglect, misuse, theft and events beyond the control of the Contractor or Vehicle Operator.
3. Daily pre service checks including hybrid systems, coolant and oil levels and the topping up of screen wash etc.
4. Damage caused by a failure to maintain vehicle system levels (e.g. oil, coolant etc), inappropriate charging or overfilling of engine oil, coolant etc.
5. Cost of MOT test, road fund licence, operator's licence.
6. Free issue equipment maintenance and repairs.
7. CCTV recording equipment, ticketing equipment (including cash vaults and remote validators), iBus equipment maintenance and repair.
8. Replacement of Logos, branding vinyls, notices, and advert panels.
9. Fuelling and cleaning.
10. Wheels and tyres.
11. Repainting and refurbishment.
12. Saloon fire extinguisher maintenance and replacement.
13. Damage resulting from inappropriate use of the vehicle
14. Unauthorised modifications.

5.0 Assumptions

1. A designated area in an appropriately equipped facility with secure parts/equipment storage/office will be provided free of charge to the Contractor.
2. Access to facilities as required. See 6.0
3. Scheduled Vehicle availability for routine inspection and servicing.
4. All routine work to be carried out in normal working hours Monday - Friday 0800 - 1700.
5. Any inclusive work required outside these hours, carried out by either the Contractor or an appointed agent, must be costed within the Contract.
6. It is proposed that for the first 6 months of the new operation the Customcare Engineers will provide on site cover for the early morning run-out and other key times (Details to be agreed).
7. Contractor will at all times abide by Operator's safety procedures, safe working practices and standard operating procedures.
8. Operator will provide all necessary site safety instruction, training and work permits to the contractor and the contractor's agents prior to commencement.
9. Vehicles will be maintained by fully trained Customcare Technicians.

6.0 Infrastructure Requirements:

1. A designated area for service and maintenance. The designated area should be large enough to park two buses side by side.
2. Vehicle lifting equipment.
3. Compressed air supply.
4. 32 Amp power supply.
5. 240v 13 Amp power supply.
6. A secure internet connection for downloading programmes.
7. A secure stores area is to be designated for service and maintenance material.

8. Access to garage brake test, emission testing and beam setting equipment as required.
9. Access to a forklift and operator for the handling for heavy items e.g. battery packs and generators etc.

Monthly charges per Vehicle shall be subject to adjustment by means of the Price Review Board defined in Clause 17.13 of the Contract.

SCHEDULE 15

ANTICIPATED CHANGES IN LAW

The Contractor shall as soon as reasonably practicable, and in any event within ten (10) Business Days of the date of this Contract (13 January 2010), notify the Company of any Anticipated Changes in Law, which shall be deemed to be incorporated into this Schedule 15 as at the Effective Date.

SCHEDULE 16

FORM OF PARENT COMPANY GUARANTEE

(Letterhead of Wrights Group Limited)

To: London Bus Services Limited

42-50 Victoria Street

London

SW1H 0TL

Date:

Dear Sir/Madam

We, Wrights Group Limited ("**the Guarantor**"), understand that you have agreed to enter into Contract No 4600002359 / 4600003109 ("**the Contract**") with Wrightbus Limited ("**the Service Provider**") in respect of the provision of 600 New Bus for London vehicles on the condition that the obligations of the Service Provider under the Contract be guaranteed by a Guarantor.

We are the parent company of the Service Provider, and we warrant to you that this description of our relationship with/to the Service Provider is true and accurate in all material respects.

WE HEREBY AGREE AND UNDERTAKE with you as follows:-

- (a) We unconditionally guarantee on demand:
- (i) the proper, complete and punctual performance by the Service Provider of any and all its obligations, undertakings and responsibilities under the Contract; and
 - (ii) the due and punctual payment by the Service Provider of all sums, liabilities, awards, losses, damages, costs, charges and expenses that may be or become due and payable to you under or arising out of the Contract in accordance with its terms or otherwise by reason or in consequence of any default on the part of the Service Provider in

relation to the Contract;

when and as the same shall become due for performance or payment (as the case may be).

- (b) As a separate and primary obligation we unconditionally guarantee to you that in the case of default by the Service Provider in making any of the payments or in performing any of the obligations, undertakings and responsibilities set out in paragraph (a) above, we shall on demand pay all sums and observe and perform any or all of such obligations, undertakings and responsibilities as if we instead of the Service Provider were the primary obligor. Any payment under this Guarantee shall be made by us in pounds sterling or in any currency which may from time to time replace pounds sterling.
- (c) This Guarantee shall be a continuing security and shall remain in full force and effect until all obligations to be performed or observed by the Service Provider under or arising out of the Contract have been duly and completely performed and observed and the Service Provider shall have ceased to be under any actual or contingent liability to you thereunder.
- (d) Any demand or other notice made by you under this Guarantee shall be duly made if sent by first class recorded delivery post to us.
- (e) You shall be entitled to enforce this Guarantee without first notifying the Service Provider of any default or taking any proceedings or demanding upon, enforcing or exhausting any right or remedy against the Service Provider or any other person or taking any action to enforce any other security, bond or guarantee held by you or making or filing any claim in a bankruptcy, liquidation, administration or insolvency of the Service Provider or any person.
- (f) If any sum due or purportedly due under this Guarantee is not or would not be recoverable under a guarantee for any reason whatsoever, whether or not known to you, such sum shall still be recoverable from us as a sole principal debtor upon the terms of this Guarantee.

PROVIDED THAT:

1. We shall be under no greater obligation or greater liability under this Guarantee than we would have been under the Contract if we had been named as the Service Provider in the Contract.
2. Our obligations hereunder are those of primary obligor and shall remain in full force and effect and shall not be terminated, reduced, discharged or otherwise affected by:
 - (a) any alteration or variation to the terms of the Contract made by agreement between you and the Service Provider (including, without limitation, any increase in the Service Provider's obligations under the Contract or any alteration in the extent or nature or sequence or method or timing of the Services to be carried out under the Contract) or any novation of the Contract (in whole or in part) permitted by the Contract; or
 - (b) any time being given to the Service Provider or any other indulgence, waiver, concession, forbearance or forgiveness to the Service Provider (whether express or by conduct) or any other thing done, omitted or neglected to be done under the Contract; or
 - (c) any other bond, security or guarantee now or hereafter held by you for all or any part of the obligations of the Service Provider under the Contract; or
 - (d) the release or waiver of any such bond, security or guarantee referred to in paragraph 2(c) above; or
 - (e) any amalgamation, reconstruction or dissolution including, without limitation, winding-up of the Service Provider; or
 - (f) the winding-up, bankruptcy, administration, receivership or insolvency of the Service Provider; or
 - (g) any legal limitation, disability or incapacity relating to the Service Provider or discharge by operation of law or any change in the constitution, name or style of the Service Provider or any other person (whether or not known to you); or
 - (h) any total or partial invalidity in, irregularity affecting or unenforceability of any of the obligations of the Service Provider under the Contract; or

- (i) the termination or partial termination of the Contract or the cessation of any Services for any reason or the making of any variation to the Services in accordance with the Contract; or
 - (j) any claim or enforcement of payment from the Service Provider or any other person;
 - (k) any act or omission which would not have discharged or affected the liability of a sole principal debtor instead of a guarantor or any act or omission, matter or thing which, but for this provision, might operate to exonerate, discharge, reduce or extinguish our liability under this Guarantee.
3. So long as we remain under any actual or contingent liability under this Guarantee, we shall not exercise any right of subrogation or any other right or remedy which we may have against the Service Provider in respect of any payment made by or sum recovered from us pursuant to or in connection with this Guarantee or prove in any liquidation of the Service Provider in competition with you for any sums or liabilities owing or incurred to us by the Service Provider in respect of any such payment by or recovery from us or take or hold any security from the Service Provider in respect of any liability of ours hereunder. We shall hold any monies recovered or security taken or held in breach of this provision in trust for you.
4. Except where prevented from doing so by law, we waive and agree not to enforce or claim the benefit of any and all rights we have or may from time to time have as guarantor under any applicable law which is or may be inconsistent with any of the provision of this Guarantee.
5. This Guarantee is irrevocable.
6. This Guarantee, executed and delivered as a deed, is governed by and shall be construed in accordance with the law of England and Wales. The courts of England shall have exclusive jurisdiction to settle any dispute which may arise out of or in connection with this Guarantee except that you have the right in your absolute discretion to enforce a judgment and/or to take proceedings in any other jurisdiction in which we are incorporated or in which any of our assets may be situated. You and we agree to submit to that jurisdiction.

7. You will be entitled to assign the benefit of this Guarantee in whole or in part but we may not assign the benefit and/or delegate the burden of this Guarantee in whole or in part or enter into any transaction which would result in any of those benefits and/or burdens passing to another person.

8. If any provision (in whole or in part) of this Guarantee is found by any court, tribunal, administrative body or authority of competent jurisdiction to be wholly or partly illegal, invalid or unenforceable then that provision shall, to the extent required, be severed from this Guarantee and shall be ineffective, without, so far as is possible, modifying any other provision of this Guarantee and this shall not affect any other provisions of this Guarantee which shall remain in full force and effect.

Executed as a Deed and delivered the day and year written above.

Executed as a Deed by)	_____
Wrights Group Limited)	Director
acting by a Director and the)	
Secretary or by two Directors)	_____
		Director/Secretary

SCHEDULE 17

2012 ORDER PRODUCTION PROGRAMME

Year	Month	Monthly Delivery	Cumulative Delivery
2013	Jan-13	0	0
	Feb-13	7	7
	Mar-13	9	16
	Apr-13	4	20
	May-13	8	28
	Jun-13	10	38
	Jul-13	10	48
	Aug-13	15	63
	Sep-13	17	80
	Oct-13	16	96
	Nov-13	16	112
	Dec-13	15	127
2014	Jan-14	20	147
	Feb-14	26	173
	Mar-14	26	199
	Apr-14	22	221
	May-14	26	247
	Jun-14	24	271
	Jul-14	12	263
	Aug-14	18	301
	Sep-14	24	325
	Oct-14	24	349
	Nov-14	24	373
	Dec-14	24	397
2015	Jan-15	18	415
	Feb-15	24	439
	Mar-15	24	463
	Apr-15	24	487
	May-15	12	499
	Jun-15	12	511
	Jul-15	8	519
	Aug-15	11	530
	Sep-15	14	544
	Oct-15	12	556
	Nov-15	13	569
	Dec-15	12	581
2016	Jan-16	12	593
	Feb-16	7	600
	Mar-16		
	Apr-16		
	May-16		
	Jun-16		
	Jul-16		
	Aug-16		
	Sep-16		
	Oct-16		
	Nov-16		
	Dec-16		

SCHEDULE 18

OPERATIONAL PERFORMANCE TARGETS

	Target	Proposal	Measure/Objective
1	Fuel Consumption	Real world operating fuel economy. Options: <ul style="list-style-type: none"> • Min % MLTB contract target; or • Tolerance to account for summer/winter operation and AC use. 	80% - 8%
2	Peak vehicle availability	Weekday morning peak vehicle availability – measures serviceability of the fleet. Spare vehicle contingent should provide sufficient float to always have required number of vehicles to meet demand.	100%
3	Available hours vs Duty hours	As per contract	>95%
4	On road failures	Report number by period related to fleet size	Comparable to current performance of hybrid fleets
5	Downtime awaiting parts/service	Total downtime hours of vehicle non availability waiting for parts/repair action. Measuring Wrightbus Customcare performance	Low no. lost availability days/decreasing trend
7	HEV mode See also 9	Based on experience to date some measure of this may be necessary as a measure of Vehicle's operating efficiently. This will also be reflected in fuel consumption.	Low no. events & decreasing trend
8	Spare vehicle requirement	Minimising additional vehicle requirement to support the service within a location.	15% max
9	Feature shortfalls	Vehicles operating with shortcomings e.g.: <ul style="list-style-type: none"> • In DE mode • AC not functioning • Heating not effective • Wheelchair ramp non-operational 	Low no. events & decreasing trend
10	Maintenance and repair hours	An acceptable ceiling should be set to show that total maintenance hours are in line with expectations and comparable to other vehicle types. Figure can be forecast by the Contractor based on servicing requirements, parts life etc.	Comparable to current work load effort for hybrid fleets

SCHEDULE 19
INFORMATION REPORTING

Criteria	Measure	Target	How	Recording Frequency	Source
Routine maintenance effort	No. hours per bus per period for scheduled servicing	Comparable to current hybrid vehicles	CustomCare records	Period	Contractor
Non routine maintenance effort arising from driver reports	No. hours per bus per period for fault rectification arising from driver reports/in service faults	Comparable to current hybrid vehicles	CustomCare records	Period	Contractor
In service failures	Number of in service failures	Track and demonstrate increasing/improving trend.	CustomCare logs	Weekly	Contractor
Inspection defects	Number of defects reported during routine inspection	Low number with no increasing trend	CustomCare records	Per inspection	Contractor
Work arising from inspection	Hours of rectification work arising from routine inspection	Record hours and trend	CustomCare records	Period	Contractor
Parts replacement/repair	Log of parts needing to be replaced	Demonstrate improving trend	CustomCare records	Weekly per bus, average for fleet	Contractor
Bill of materials	Copy to be provided save where no charge made from previous edition				Contractor

NOTE – A 'period' is a 4-week period coinciding with the Company's periodic reporting cycle.

SCHEDULE 20

LETTER TO COMPANY PURSUANT TO CLAUSE 7A.9

London Bus Services Limited
Windsor House
42-50 Victoria Street
London SW1H 0TL

[●] March 2013

Dear Sirs

Re: Amended and Restated Design and Supply and Maintenance of Double Decker Bus Vehicles Contract [insert date] 2013 (Contract No 4600002359 / 4600003109) (Contract)

We refer to paragraph 17 of the Memorandum of Understanding made between the Company and the Contractor on 4 December 2012 and to clause 7A. 9 of the Contract which obliges the Contractor to provide an equitable agreement in respect of the advance payments described in Clause 7A.6.1.2 of the Contract (**Advance Payments**). Terms which are defined in the Contract shall have the same meaning in this agreement unless otherwise specified.

In consideration of the Advance Payments being made to the Contractor in and in addition to the security provided to the Company pursuant to clause 7A 15 of the Contract, the Company shall be entitled to call upon the Contractor to execute and deliver a floating charge (in satisfaction of the requirement to provide an equitable agreement under the Memorandum of Understanding referred to above) in favour of the Company substantially in the form of the charge attached to this agreement (**Charge**) over the Secured Chattels (as such term is defined in the Charge) subject always to the occurrence of an Event of Default at any time prior to the delivery by the Contractor of the 250th Production Vehicle (**Long Stop Date**).

For the purposes of this agreement, the expression Event of Default shall have the following meaning:



SCHEDULE TO LETTER TO COMPANY PURSUANT TO CLAUSE 7A.9

Dated

2013

- Wrightbus Limited
- London Bus Services Limited

Floating Charge

Carson
McDowell

Murray House, Murray Street, Belfast,
BT1 6DN

T. +44 (0) 28 9024 4951

F. +44 (0) 28 9024 5768

DX 403 NR BELFAST

File Ref: THA/JF/5858/82

www.carson-mcdowell.com

CONTENTS

Clause		Page
1	INTERPRETATION.....	1
2	COVENANT.....	7
3	CHARGING CLAUSE.....	7
4	NEGATIVE PLEDGE AND DISPOSAL RESTRICTIONS.....	8
5	REPRESENTATIONS AND WARRANTIES.....	8
6	UNDERTAKINGS.....	10
7	ENFORCEABILITY.....	14
8	ENFORCEMENT OF SECURITY.....	14
9	APPLICATION OF PROCEEDS.....	16
10	PROTECTION OF THIRD PARTIES.....	17
11	PROTECTION OF THE COMPANY.....	17
12	POWER OF ATTORNEY.....	19
13	APPLICATION, VARIATION AND EXTENSION OF STATUTORY PROVISIONS.....	19
14	OTHER MISCELLANEOUS PROVISIONS.....	20
15	COMMUNICATIONS.....	24
16	GOVERNING LAW.....	25
17	THIS DEED.....	25

This deed is made on 2013 between:

- (1) **WRIGHTBUS LIMITED** a company incorporated in Northern Ireland with company number NI006119 and whose registered office is at Galgorm Industrial Estate, Fenaghy Road, Galgorm, Ballymena, County Antrim BT42 1PY (the “**Chargor**”); and
- (2) **LONDON BUS SERVICES LIMITED** registered in England and Wales under the number 03914787 and having a registered office at Windsor House, 42-50 Victoria Street, London SW1H 0TL (the “**Company**”)

1. **INTERPRETATION**

1.1 **Expressly defined terms**

In this deed:

“**Agreement**” contract No: 4600002359 / 4600003109 dated 13 January 2010 between (1) the Company and (2) the Chargor as amended and restated on [] 2013 and as varied, amended or restated from time to time

“**Authorisation**” means an authorisation, consent, approval, resolution, licence, exemption, filing, notarisation or registration

“**Business Day**” means a day, other than a Saturday or a Sunday, on which banks are open for general business in London or, for the purpose of clause 15 (Communications), in the principal financial centre in the jurisdiction in which the relevant communication is delivered

“**Chattels**” means the Charged Chattels and subject to the terms of this deed includes any part or parts of such assets

“**Charged Chattels**” means such present or future Vehicles together with the materials and component parts used by the Chargor in the construction of same which are the subject of the Agreement owned by the Chargor

“**Data and Records**” means all accounting, financial, maintenance, registration, insurance claims, or other information and data of any nature and in whatever form or media created or stored held by or on behalf of the Chargor in relation to the Chattels, including:

- (a) all registers of Chattels, purchase invoices and other financial records and VAT and other tax records;

- (b) policies of insurance in respect of which the Insurance Proceeds are secured pursuant to this deed;
- (c) log books, registered user certificates, manuals, handbooks, instruction books, guidance notes, maintenance records, test certificates and reports, drawings, technical data and other documentation;
- (d) any output from any processing tasks relation to such information or data performed by any relevant computer system;
- (e) any passwords necessary to obtain access to such computer system or any such information or data stored on it; and
- (f) the back-up tapes, disks or drives relating to or containing such output

“Delegate” means any delegate, agent, attorney or trustee appointed by the Company

“Default Rate” means two per cent. per annum above the highest rate of Interest ordinarily applicable to the Secured Obligations from time to time

“Discharge Date” means the date with effect from which the Chargor has delivered to the Company the 250th Production Vehicle pursuant to clause 7A of the Agreement (as amended).

“Enforcement Party” means any of the Company, a Receiver or a Delegate

“Event of Default” any breach by the Chargor of or non-compliance by the Chargor with the provisions of this deed or of the Agreement

“Expenses” means: all fees, discounts, commissions and other banking or service charges, legal and other professional fees, premiums, costs or expenses, in each case calculated on a full indemnity basis and together with VAT, incurred by any Enforcement Party in connection with the Secured Assets, the preparation, negotiation and creation of this deed, taking, perfecting, enforcing or exercising any power under this deed, the appointment of any Receiver or Delegate, the breach of any provision of this deed and/or the protection, realisation or enforcement of this deed, and includes the costs of transferring to the Company or the Receiver any security ranking in priority to the security constituted by this deed, or the amount required to be paid to secure the unconditional and irrevocable discharge of such security, or any of the foregoing as the context shall require

“Group” means any group of companies for the time being comprising the Chargor, its Subsidiaries, any company of which the Chargor is a Subsidiary and any other Subsidiary of such company

“Insurances” means all contracts or policies of insurance of whatever nature relating to the Secured Assets which from time to time are taken out or maintained by or on behalf of the Chargor or (to the extent of its relevant interest) in which the Chargor has an interest

“Insurance Proceeds” means the proceeds of any claim received by the Chargor arising out of the Insurances, after deduction of any reasonable expenses incurred in relation to the relevant claim and payable by the Chargor to any person which is not a member of the Group, together with the benefit of all bonuses, profits, returns of premium and other benefits of whatever nature arising by virtue of the Chargor’s ownership of the Insurances and all interest on any of the foregoing

“Insolvency Act” means Insolvency Act 1986

“Interest” means interest at the rate provided in and calculated and compounded in accordance with the Agreement both before and after judgement

“LPA” means Law of Property Act 1925

“Party” means a party to this deed

“Physical Materials” means every item of physical material now in existence, or not yet in existence but created or acquired by the Chargor after the date of this deed, whatever its description or category, relating to the Chattels including any comprised within the Data and Records, and in respect of each such item the original copy or version or variant owned or produced by or delivered to or lawfully obtained by the Chargor, including disks, tapes, recordings or source and/or object codes, other media whether or not comprised within the Data and Records or which relate to any computer or other electronic system used for the recovery or display of the Data and Records

“Receiver” means any one or more receivers and managers or (if the Company so specifies in the relevant appointment) receivers appointed by the Company pursuant to this deed in respect of the Chargor or in respect of the

Secured Assets or any of them

“**Secured Assets**” means the Chattels and all other assets charged or otherwise the subject of any security created by or pursuant to this deed and includes any part or parts of such assets

“**Secured Obligations**” means the obligations or liabilities which may now or at any time in the future be due, owing or incurred by the Chargor to the Company under the Agreement, whatever their nature or basis, in any currency or currencies and however they are described together with Interest and Expenses

“**Security Period**” means the period beginning on the date of this deed and ending on the Discharge Date

“**Subsidiary**” means a subsidiary within the meaning of section 1159 of the Companies Act 2006 or a subsidiary undertaking within the meaning of section 1162 of the Companies Act 2006

“**Third Parties Act**” means the Contracts (Rights of Third Parties) Act 1999

“**VAT**” means value added tax as provided for in the Value Added Taxes Act 1994 and any other tax of a similar fiscal nature

“**Vehicles**” has the meaning given to it in the Agreement.

1.2 **Construction**

In this deed:

1.2.1 any reference to:

1.2.1.1 the word “**assets**” includes present and future property, revenue, rights and interests of every kind;

1.2.1.2 the word “**guarantee**” includes any guarantee or indemnity and any other financial support (including any participation or other assurance against loss and any deposit or payment) in respect of any person’s indebtedness;

1.2.1.3 the word “**indebtedness**” includes any obligation for the payment or repayment of money, whatever the nature

or basis of the relevant obligation (and whether present or future, actual or contingent);

1.2.1.4 the word “**law**” includes law established by or under statute, constitution, treaty, decree, regulation or judgment, common law and customary law; and the word “**lawful**” and similar words and phrases are to be construed accordingly;

1.2.1.5 the word “**person**” includes any individual, company, corporation, firm, government, state or any agency of a state and any association, partnership or trust (in each case, whether or not it has separate legal personality);

1.2.1.6 the word “**regulation**” includes all guidelines, official directives, regulations, requests and rules (in each case, whether or not having the force of law) of any governmental, inter-governmental or supranational agency, body or department or of any regulatory or other authority or organisation (whether statutory or non-statutory, governmental or non-governmental);

1.2.1.7 the word “**security**” includes any assignment by way of security, charge, lien, mortgage, pledge or other security interest securing any obligation of any person and any other agreement or arrangement having a similar effect;

1.2.1.8 the word “**set-off**” includes analogous rights and obligations in other jurisdictions; and

1.2.1.9 the word “**tax**” includes any tax, duty, impost or levy and any other charge or withholding of a similar nature (including any interest or penalty for late payment or non-payment);

1.2.2 where something (or a list of things) is introduced by the word “**including**”, or by the phrase “**in particular**”, or is followed by the phrase “**or otherwise**”, the intention is to state an example (or examples) and not to be exhaustive (and the same applies when other similar words or phrases are used);

- 1.2.3 each reference to the “**Chargor**”, or to the “**Company**” or “**Party**” or includes its successors in title, and its permitted assignees or permitted transferees;
- 1.2.4 unless this deed expressly states otherwise or the context requires otherwise, (a) each reference in this deed to any provision of any statute or of any subordinate legislation means, at any time, the relevant provision as in force at that time (even if it has been amended or re-enacted since the date of this deed) and (b) each reference in this deed to any provision of any statute at any time includes any subordinate legislation made pursuant to or in respect of such provisions as in force at such time (whether made before or after the date of this deed and whether amended or re-enacted since the date of this deed);
- 1.2.5 each reference to this deed (or to any other agreement or deed) means, at any time, this deed (or as applicable such other agreement or deed) as amended, novated, re-stated, substituted or supplemented at that time, provided that the relevant amendment, novation, re-statement, substitution or supplement does not breach any term of this deed or the Agreement;
- 1.2.6 each reference to the singular includes the plural and vice versa, as the context permits or requires;
- 1.2.7 the index and each heading in this deed is for convenience only and does not affect the meaning of the words which follow it;
- 1.2.8 each reference to a clause is (unless expressly provided to the contrary) to be construed as a reference to the relevant clause of this deed;
- 1.2.9 an Event of Default is “**continuing**” if it has not been waived.

1.3 **Third Party Rights**

- 1.3.1 A person who is not an Enforcement Party has no right under the Third Parties Act to enforce or enjoy the benefit of any term of this deed or of the Agreement except to the extent that this deed expressly provides for it to do so.

1.3.2 No consent of any person who is not a Party is required to rescind or vary this deed at any time.

1.3.3 This **clause 1.3** does not affect any right or remedy of any person which exists, or is available, otherwise than pursuant to the Third Parties Act.

2. **COVENANT**

2.1 **Covenant**

The Chargor, as primary obligor and not merely as surety, covenants with the Company that it will discharge and perform the Secured Obligations on demand and (where applicable) in the manner provided in the Agreement.

2.2 **Default Interest**

Any amount which is not paid under this deed on the due date shall bear interest (as well after as before judgment) payable on demand at the Default Rate from time to time from the due date until the date of actual unconditional and irrevocable payment and discharge of such amount in full, save to the extent that interest at such rate on such amount and for such period is charged pursuant to any other document relevant to that liability and itself constitutes part of the Secured Obligations.

3. **CHARGING CLAUSE**

3.1 **Grant of security**

The Chargor, as a continuing security for the payment, discharge and performance of the Secured Obligations charges the Chattels in favour of the Company by way of first floating charge.

3.2 **Notice of assignment or charge**

The Chargor shall forthwith upon receiving a request to that effect from the Company give notice of or charge of its right, title and interest (if any) in and to:

3.2.1 the Insurance Proceeds, to each of the other parties to the Insurances;

- 3.2.2 any maintenance or support contracts relating to the Chattels, to the other parties to such contracts;
- 3.2.3 the Chattels and the Physical Materials, to the owner of any premises where the Chattels or the Physical Materials are kept from time to time; and
- 3.2.4 any other assets to such persons as the Company may require;

and every such notice will be in such form as the Company may reasonably require or agree.

3.3 Continuing security

All the security granted or created by this deed is to be a continuing security which shall remain in full force and effect notwithstanding any intermediate payment or settlement of account or other matter or thing whatsoever and in particular the intermediate satisfaction by the Chargor or any other person of the whole or any part of the Secured Obligations.

3.4 Full title guarantee and implied covenants

All the security created or given under this deed is made with full title guarantee in accordance with the Law of Property (Miscellaneous Provisions) Act 1994.

4. NEGATIVE PLEDGE AND DISPOSAL RESTRICTIONS

4.1 Negative pledge

During the Security Period, the Chargor must not create, extend or permit to subsist any security over any of the Secured Assets, nor may it sell, transfer lease or otherwise dispose of any of, or any interest in, the Chattels, nor enter into any other preferential arrangement having a similar effect.

5. REPRESENTATIONS AND WARRANTIES

The Chargor represents and warrants to the Company on the date of this deed and on each subsequent date upon which the representations and warranties set out in the Agreement are repeated and upon which falls during the Security Period as follows:

5.1 **Status**

it is a limited liability company and has the power to own its assets and carry on its business and other activities as they are being conducted;

5.2 **Power and enforceability**

the Chargor has the power to enter into this deed and to perform its obligations and exercise its rights under it and the obligations expressed to be assumed by it under this deed are (and at all relevant times have been) legal, valid, binding and enforceable obligations (subject to the principle that equitable remedies are discretionary and subject to any applicable insolvency laws);

5.3 **No Event of Default**

5.3.1 no Event of Default has occurred or is continuing or might reasonably be expected to result from the execution of this deed or from effect being given to its provisions; and

5.3.2 no person who holds any other security over the Secured Assets or over any other asset of the Chargor has enforced or given notice of its intention to enforce such security;

5.4 **Non-conflict with other obligations**

neither the execution of this deed by the Chargor, nor the Chargor's compliance with its terms will:

5.4.1 conflict with or result in any breach of any law or regulation applicable to it;

5.4.2 cause any limitation on any of its powers or on the right or ability of its directors to exercise those powers to be exceeded; nor

5.4.3 constitute a default, acceleration of payment or termination event (however described) under any agreement or instrument binding upon it;

5.5 **Authorisations**

all Authorisations required or desirable for the execution, delivery, issue, validity or enforceability of this deed or of the performance of the Chargor's

obligations or the exercise of its rights under this deed have been obtained and have not been (and the Chargor is not aware of any circumstance having arisen whereby they might be) withdrawn or varied in whole or part;

5.6 Commercial benefit, etc.

5.6.1 it has given due consideration to the terms and conditions of the documents evidencing the Secured Obligations and of this deed and has satisfied itself that there are reasonable grounds for believing that by executing this deed it will derive commercial benefit; and

5.6.2 that it enters into this deed in good faith and for the purposes of its business;

5.7 Legal and Beneficial Owner

subject to the terms of the Agreement it is the legal and beneficial owner of the Chattels free from all security or third party rights whatsoever and none of the Chattels bears any nameplates, notices or other notifications of any third party's adverse interest in such Chattel;

5.8 Repair and condition - no claims

the Chattels are in a good state of repair and in good working order and condition, have at all times been used and operated in accordance with all applicable laws, and are not now, and have not been, the subject of any claim under the Insurances, nor against the manufacturer, supplier or any other third party in respect of any obligation, warranty or guarantee assumed or given in relation to the Chattels; and

5.9 Location of Chattels

it has supplied to the Company an accurate register disclosing the identity and current location of each of the Chattels.

6. UNDERTAKINGS

The Chargor undertakes to the Company in the terms of the following provisions of this **clause 6**, all such undertakings to commence on the date of this deed and to continue throughout the Security Period:

6.1 Perform

it will at all times comply with the terms (express or implied) of this deed and of all contracts relating to the Secured Obligations;

6.2 Not to jeopardise security

it will not do anything or allow anything to be done which may in any way depreciate, jeopardise or otherwise prejudice the value to the Company of the security constituted by this deed;

6.3 Chattels Register

it will open, maintain and keep up to date a register recording details of all the Chattels sufficient to enable the Chattels to be identified and located, and will, whenever the Company requires it to do so, produce to the Company a true copy of such register;

6.4 Maintenance

it will keep the Chattels in a good state of repair and in good working order and condition and renew, service and overhaul the Chattels as necessary, utilising properly qualified personnel;

6.5 Observe requirements of law

it will comply with all laws applicable to the ownership or use of the Chattels;

6.6 Pursue claims

if during the Security Period, it becomes apparent that the Chattels suffer from any defect in title, merchantable quality, fitness for purpose or condition or failure to correspond to any relevant description presenting grounds for claim, whether based on statute or contract, or there are any other grounds for making a claim under any contractual warranty, obligation or guarantee relating to the Chattels, it will at its own cost and expense diligently prosecute (or, as the Company may require, join with or assist the Company in prosecuting) all claims available to it or the Company in respect of such matters;

6.7 Discharge obligations

- 6.7.1 it will at all times pay and discharge, as they fall due, all debts, damages and liabilities which relate to the Chattels or otherwise and which have given, or may give rise to, liens on or claims enforceable against the Chattels, and in the event that any of the Chattels is seized or detained by any person in exercise of any such lien or claim the Chargor will promptly procure the release of such of the Chattels from such seizure or detention;
- 6.7.2 it will pay on the due date all rents, fees, charges and taxes payable in respect of any premises at which any of the Secured Assets may be kept; and
- 6.7.3 it will punctually pay all costs, fees and expenses which relate to the Chattels,

and in every case will produce to the Company, on demand, evidence of payment or discharge;

6.8 Prevent annexation

it will procure that none of the Chattels will become affixed or annexed to real property in such a manner or to such a degree that it ceases to be a chattel or that title in it passes to the owner of such real property;

6.9 Access

it will permit the Company and its professional advisers, agents and contractors free access at all reasonable times and on reasonable notice (at the risk and cost of the Chargor) to the Secured Assets and to the Data and Records and to the premises at which any are located from time to time;

6.10 Notification to the Company

- 6.10.1 it will promptly inform the Company in writing of any material damage suffered by, or loss of, the Chattels;
- 6.10.2 forthwith upon receiving the same, it will supply to the Company a copy of any notice or claim from any third party affecting or likely to affect the Chattels and will supply such further particulars or information relating to such notice or claim as the Company may request;

6.10.3 immediately upon becoming aware of the same, it will notify the Company of any circumstance or event which may give rise to the service of any such notice or the making of any such claim as is mentioned in **clause 6.10.2**;

6.11 **Further assurance**

it will at all times (and forthwith upon the Company's written request) but at the Chargor's own expense take all steps (including the making of all filings and registrations and the payment of all fees and taxes) and execute all documents necessary or, in the reasonable opinion of the Company, desirable (a) to render effective and valid any security or any right or power created or intended to be created or evidenced under or by this deed but which is or may be ineffective or invalid, (b) to perfect, protect or improve any such security or to facilitate its enforcement or realisation, (c) to protect the Company's position under this deed or any other deed or document entered into pursuant to this deed or (d) in connection with the exercise of any of any rights or powers by any Enforcement Party under or in relation to this deed, and so that any security document required to be executed pursuant to this clause will be in such form and will contain such provisions as the Company may reasonably require;

6.12 **Insurance**

6.12.1 except to the extent that the Company elects to effect insurances over the Chattels, it will obtain, maintain and renew (all at its own expense) with reputable insurance companies or underwriters in respect of the Chattels insurance cover against such risks and to the extent as is usual for companies carrying on the same or substantially similar business (and if applicable in accordance with the recommendations of any insurance report delivered to the Company in contemplation of or at or around the date of this deed);

6.12.2 it will procure and promptly produce to the Company evidence satisfactory to the Company that a note of the Company's interest is endorsed upon all such insurance policies maintained by the Chargor;

6.12.3 it will promptly pay all premiums and other sums necessary to effect and maintain the Insurances required by this deed and will on

demand produce to the Company the Insurances and evidence that the premiums and other sums have been paid; and

6.12.4 to the extent that the Company elects to effect insurances over the Chattels it will promptly upon demand reimburse or pay to the Company all premiums or other sums expended by the Company in effecting such insurances;

6.13 **Expenses**

it will pay all Expenses on demand. If it does not do so, the Expenses will bear Interest at the Default Rate from and including the date of demand to and including the date of actual payment;

6.14 **Power to remedy**

it agrees that if the Chargor fails to comply with any of the covenants and undertakings set out or referred to in **clauses 6.1** to 6.13 inclusive it will allow (and hereby irrevocably authorises) the Company and/or such persons as the Company nominates to take such action (including the making of payments) on behalf of the Chargor as is necessary to ensure that such covenants are complied with; and

7. **ENFORCEABILITY**

For the purposes of all powers implied by the LPA or any other applicable statute the Secured Obligations shall be deemed to have become due and payable and this deed will become immediately enforceable and the powers of the Company and any Receiver exercisable on the date of this deed, but, as between the Company and the Chargor, the power of sale shall be exercisable only upon the occurrence of an Event of Default and for so long as it is continuing (unless there has been a request from the Chargor to the Company for the appointment of a Receiver, in which case it shall be exercisable at any time following the making of such request).

8. **ENFORCEMENT OF SECURITY**

8.1 At any time after the Company's power of sale has become exercisable, the Company may without further notice:

- 8.1.1 appoint one or more than one Receiver in respect of the Secured Assets or any of them and if more than one Receiver is appointed the Receiver may act jointly and severally or individually; or
 - 8.1.2 take possession of the Secured Assets; or
 - 8.1.3 in its absolute discretion enforce all or any part of the security created by this deed in such other lawful manner as it thinks fit.
- 8.2 The Company may remove the Receiver and appoint another Receiver and the Company may also appoint an alternative or additional Receiver.
- 8.3 The Receiver will, so far as the law permits, be the agent of the Chargor and the Chargor alone will be responsible for the acts or defaults of the Receiver and will be liable on any contracts or obligations made or entered into by the Receiver. The Company will not be responsible for any misconduct, negligence or default of the Receiver.
- 8.4 The powers of the Receiver will continue in full force and effect following the liquidation of the Chargor.
- 8.5 The remuneration of the Receiver may be fixed by the Company but will be payable by the Chargor. The amount of the remuneration will form part of the Secured Obligations.
- 8.6 The Receiver will have the power on behalf and at the cost of the Chargor:
- 8.6.1 to do or omit to do anything which he considers appropriate in relation to the Secured Assets; and
 - 8.6.2 to exercise all or any of the powers conferred on the Receiver or the Company under this deed or conferred upon administrative receivers by the Insolvency Act (even if he is not an administrative receiver), or upon receivers by the LPA or any other statutory provision (even if he is not appointed under the LPA or such other statutory provision).
- 8.7 If (notwithstanding any representation or warranty to the contrary contained in this deed) there shall be any security affecting the Secured Assets or any of them which ranks in priority to the security created by this deed and the holder of such prior security takes any steps to enforce such security, the

Company or any Receiver may, at its option, take a transfer of, or repay the indebtedness secured by, such security.

8.8 The Company may, at any time after this deed has become enforceable pursuant to **clause 7** (*Enforceability*), exercise, to the fullest extent permitted by law, all or any of the powers authorities and discretions conferred on a Receiver by this deed, whether as attorney of the Chargor or otherwise and whether or not a Receiver has been appointed.

8.9 The Company may, in writing, either in its appointment of a Receiver or by subsequent notice to that Receiver, restrict the right of such Receiver to exercise all or any of the powers conferred on Receivers by this deed.

9. **APPLICATION OF PROCEEDS**

9.1 **Recoveries by Receiver**

The proceeds arising from the exercise of the powers of the Receiver will, subject to any claims ranking in priority to the Secured Obligations, be applied by or at the direction of the Receiver in or towards discharging or satisfying, in the following order of priority:

9.1.1 the costs, charges and expenses of and incidental to the Receiver's appointment and the payment of his remuneration;

9.1.2 any costs, charges, expenses and liabilities of or incurred by any Enforcement Party in the exercise of any of its powers including all rents, taxes, rates and outgoings whatever affecting the Secured Assets, all premiums on Insurances properly payable under this deed or any applicable statute, the cost of executing necessary or proper repairs to the Secured Assets, and the payment of annual sums or other payments, and the interest on all principal sums, having priority to the Secured Obligations;

9.1.3 the Secured Obligations; and

9.1.4 the claims of those persons entitled to any surplus.

9.2 **Right of appropriation**

The Company is entitled to appropriate money and/or assets to Secured Obligations in such manner or order as it thinks fit and any such

appropriation shall override any appropriation by the Chargor.

9.3 **Insurances**

All Insurance Proceeds shall be paid to the Company (or if not paid by the insurers directly to the Company shall be held on trust for the Company) and shall (subject as otherwise provided in the documents evidencing the Secured Obligations), at the option of the Company be applied in replacing or reinstating the assets destroyed, damaged or lost (any deficiency being made good by the Chargor) or in reduction of the Secured Obligations.

9.4 **Suspense Account**

The Company may place (for such time as it thinks prudent) any money received by it pursuant to this deed to the credit of a separate or suspense account (without liability to account for interest thereon) for so long and in such manner as the Company may from time to time determine without having any obligation to apply that money or any part of it in or towards discharge of the Secured Obligations.

10. **PROTECTION OF THIRD PARTIES**

10.1 **No duty to enquire**

A buyer from or other person dealing with any Enforcement Party will not be concerned to enquire whether any of the powers which it has exercised or purported to exercise has arisen or become exercisable and may assume that it is acting in accordance with this deed.

10.2 **Receipt conclusive**

The receipt of the Company or any Receiver shall be an absolute and a conclusive discharge to a purchaser of the Secured Assets and shall relieve him of any obligation to see to the application of any monies paid to or by the direction of the Company or any Receiver.

11. **PROTECTION OF THE COMPANY**

11.1 **Company receipts**

The Company shall not be obliged to account to the Chargor, nor to any other person, for anything other than its own actual receipts which have not been distributed or paid to the person entitled (or who the Company, acting

reasonably, believes to be entitled) in accordance with the requirements of this deed.

11.2 **Exclusion of liability**

11.2.1 No Enforcement Party will be liable to the Chargor for any expense, loss liability or damage incurred by the Chargor arising out of the exercise of its rights or powers or any attempt or failure to exercise those rights or powers, except for any expense, loss, liability or damage arising from its gross negligence, fraud or wilful misconduct.

11.2.2 The Chargor may not take any proceedings against any officer, employee or agent of any Enforcement Party in respect of any claim it might have against such Enforcement Party or in respect of any act or omission of any kind by that officer, employee or agent in relation to this deed.

11.2.3 Any officer, employee or agent of any Enforcement Party may rely on this **clause 11** under the Third Parties Act.

11.3 **Effect of possession**

If the Company or any Receiver enters into possession of the Secured Assets or any of them, this will not oblige either the Company or the Receiver to account as mortgagee in possession, and if the Company enters into possession at any time of the Secured Assets or any of them it may at any time at its discretion go out of such possession.

11.4 **Chargor's indemnity**

The Chargor agrees with the Company to indemnify the Company and any Receiver or Delegate on demand against any costs, loss or liability incurred by any of them in respect of:

11.4.1 any exercise of the powers of the Company or the Receiver or any attempt or failure to exercise those powers; and

11.4.2 anything done or omitted to be done in the exercise or purported exercise of the powers under this deed or under any appointment duly made under the provisions of this deed.

12. **POWER OF ATTORNEY**

12.1 **Grant of power**

The Chargor irrevocably and by way of security appoints the Company and each Receiver and any person nominated for the purpose by the Company or the Receiver (in writing, under hand, signed by an officer of the Company or by the Receiver) severally to be the attorney of the Chargor (with full power of substitution and delegation) for the purposes set out in **clause 12.2**.

12.2 **Extent of power**

The power of attorney granted in **clause 12.1** above allows the Company, the Receiver or such nominee, in the name of the Chargor, on its behalf and as its act and deed to:

12.2.1 perfect the security given by the Chargor under this deed; and

12.2.2 execute, seal and deliver (using the Chargor's seal where appropriate) any document or do any act or thing which the Chargor may, ought or has agreed to execute or do under this deed or which the Company, the Receiver or such nominee may in their absolute discretion consider appropriate in connection with the exercise of any of the rights, powers authorities or discretions of the Company or the Receiver under, or otherwise for the purposes of, this deed.

12.3 **Ratification**

The Chargor covenants with the Company to ratify and confirm all acts or things made, done or executed by any attorney exercising or purporting to exercise the powers conferred in accordance with this **clause 12**.

13. **APPLICATION, VARIATION AND EXTENSION OF STATUTORY PROVISIONS**

13.1 Conditions applicable to power of sale etc.

13.1.1 For the purposes only of section 101 of the LPA, (but otherwise subject to the provisions of **clause 7** (*Enforceability*)), the conditions set out in that section as to when such powers arise do not apply and the Secured Obligations become due and the statutory power

of sale and other powers of enforcement arise immediately following the execution of this deed; and

13.1.2 the Company and any Receiver may exercise the statutory power of sale conferred by the LPA free from the restrictions imposed by section 103 of the LPA, which shall not apply to this deed.

13.2 Extension of powers of sale, etc.

13.2.1 The power of sale and the other powers conferred by the LPA or otherwise are extended and varied to authorise the Company in its absolute discretion to do all or any of the things or exercise all or any of the powers which a Receiver is empowered to do or exercise under this deed.

13.2.2 The Company and any Receiver shall also have and enjoy all the other powers, privileges, rights and protections conferred by the LPA and the Insolvency Act on mortgagees, receivers or administrative receivers (each as amended and extended by this deed and whether or not a receiver or administrative receiver has been appointed) but so that if there is any ambiguity or conflict between the powers contained in such statutes and those contained in this deed, those contained in this deed shall prevail.

13.3 Consolidation of mortgages

The restriction on the consolidation of mortgages in Section 93 of the LPA does not apply to this deed nor to any security given to the Company pursuant to this deed.

13.4 LPA provisions relating to appointment of Receiver

Section 109(1) of the LPA shall not apply to this deed.

13.5 Application of proceeds

Sections 105, 107(2), 109(6) and 109(8) of the LPA will not apply to the Company nor to a Receiver appointed under this deed.

14. OTHER MISCELLANEOUS PROVISIONS

14.1 Powers, rights and remedies cumulative

The powers, rights and remedies provided in this deed are in addition to (and not instead of), powers, rights and remedies under law.

14.2 Exercise of powers, rights and remedies

If an Enforcement Party fails to exercise any power, right or remedy under this deed or delays its exercise of any power, right or remedy, this does not mean that it waives that power, right or remedy. If an Enforcement Party exercises, or partly exercises, a power, right or remedy once, this does not mean that it cannot exercise such power right or remedy again, fully or in part.

14.3 Set-off and combination of accounts

14.3.1 No right of set-off or counterclaim may be exercised by the Chargor in respect of any payment due to the Company under this deed.

14.3.2 The Company may at any time after this deed has become enforceable and without notice to the Chargor:

14.3.2.1 combine or consolidate all or any of the Chargor's then existing accounts with, and liabilities to, the Company;

14.3.2.2 set off or transfer any sums standing to the credit of any one or more of such accounts; and/or

14.3.2.3 set-off any other obligation owed by the Company to the Chargor (whether or not matured at such time),

in or towards satisfaction of any of the Secured Obligations. The Company is to notify the Chargor in writing that such a transfer has been made.

14.3.3 If any amount is in a different currency from the amount against which it is to be set off, the Company may convert either amount (or both) at any reasonable time and at any reasonable rate.

14.4 Information

The Chargor authorises the holder of any prior or subsequent security to provide to the Company, and the Company to receive from such holder, details of the state of account between such holder and the Chargor.

14.5 No assignment by Chargor

The Chargor must not assign, novate or otherwise deal with its rights or obligations under or interests in this deed, except with the prior written consent of the Company, such consent not to be unreasonably withheld or delayed..

14.6 Transfer by Security Trustee

14.6.1 Save as otherwise provided in the Agreement, the Company may at any time assign, novate or otherwise deal with any rights or obligations under or interests in this deed.

14.6.2 The Company may disclose any information about the Chargor, the Secured Assets and/or this deed to any person to whom it proposes to assign or novate or transfer (or has assigned, novated or transferred) any rights or obligations under or interests in this deed, or with whom it proposes to enter into (or has entered into) any other dealings in relation to any such rights, obligations or interests.

14.6.3 Any person to whom the benefit of all such rights has been transferred, subject to such obligations, may enforce this deed in the same way as if it had been a Party.

14.7 Avoidance of settlements and other matters

14.7.1 Any payment made by the Chargor, or settlement or discharge between the Chargor and the Company, is conditional upon no security or payment to the Company by the Chargor or any other person being avoided or set aside or ordered to be refunded or reduced by virtue of any provision or enactment relating to bankruptcy, insolvency, administration or liquidation for the time being in force and accordingly (but without limiting the Company other rights under this deed) the Company shall be entitled to recover from the Chargor the value which the Company has placed upon such security or the amount of any such payment as if such payment, settlement or discharge had not occurred.

14.7.2 If the Company, acting reasonably, considers that any amount paid by the Chargor in respect of the Secured Obligations is capable of being avoided or ordered to be refunded or reduced for the reasons

set out in **clause 14.7.1**, then for the purposes of this deed such amount shall not be considered to have been irrevocably paid.

14.8 **Chargor's obligations**

The obligations of the Chargor under **clause 2.1** (*Covenant*) are unconditional and will not be affected by the occurrence or existence at any time of any of the following events or circumstances:

- 14.8.1 the Company granting any waiver or consent to any person in connection with, or allowing time for payment in respect of, the Secured Obligations or any of them or taking (or omitting to take) any other step in relation to the Secured Obligations;
- 14.8.2 the making, amendment or termination of any agreement or arrangement relating to any of the Secured Obligations;
- 14.8.3 the insolvency of any person, the appointment of a receiver or an administrator in respect of it or its property, its winding-up or dissolution or the taking of any step in connection with any composition, voluntary arrangement, discharge, settlement, reorganisation, restructuring or similar process in relation to its assets, liabilities or business;
- 14.8.4 any amendment of the terms on which any security or other rights are granted, any step being taken in connection with any security or other rights (to enforce them, to release them or to do anything else) or any omission to take any step in connection with any security or other rights which could or should have been taken, whether under this deed or otherwise;
- 14.8.5 any release of any person liable in respect of any of the Secured Obligations, whether as surety or on any other basis, or any other step being taken (or not being taken) in relation to any such person (except to the extent that the Chargor itself is expressly released from its obligations under this deed or otherwise at any time);
- 14.8.6 any lack of capacity, power or authority on the part of any person;
- 14.8.7 any person's change of name;

- 14.8.8 any change in the constitution, membership, ownership, legal form or status of any person;
- 14.8.9 any unenforceability, illegality or invalidity of any obligation of any person; or
- 14.8.10 anything else which, although it could affect the liability of a surety, would not affect the liability of a principal debtor.

14.9 **Waiver of immunity**

To the extent that the Chargor may be entitled in any jurisdiction to claim for itself or its assets immunity from suit, execution, attachment (whether in aid of execution, before judgment or otherwise) or other legal process of any kind wherever it might originate or to the extent that in any such jurisdiction there may be attributed to the Chargor or its assets such immunity (whether or not claimed), it hereby irrevocably agrees not to claim and hereby irrevocably waives such immunity to the fullest extent permitted by the laws of such jurisdiction.

14.10 **Release of security**

On the Discharge Date (but subject to **clause 14.7** (*Avoidance of settlements and other matters*)) the Company shall at the request and cost of the Chargor execute and do all deeds, acts and things as may be necessary to release the Secured Assets from the security constituted hereby or pursuant hereto.

15. **COMMUNICATIONS**

- 15.1 Each notice, consent and other communication in respect of this deed will be effective only if made by letter or fax, delivered to the relevant address or fax number specified on the execution page(s) of this deed (or to any substitute address or fax number notified in writing by the relevant Party for this purpose) and marked for the attention of the specified department/individual, if applicable. Each communication by letter will be effective only if delivered by hand, sent by first class post (if sent from and to an address in the UK) or sent by airmail (if sent from or to an address elsewhere).
- 15.2 Each communication will become effective as follows (references to times are to times in the place of delivery of the communication):

- 15.2.1 a hand-delivered letter will be effective as soon as it is delivered (or, if it is delivered after 5pm or on a day that is not a Business Day, it will be effective at 9am on the next Business Day);
- 15.2.2 a letter sent by post from and to an address in the UK will be effective at 9am on the second Business Day after it is posted and a letter sent by airmail from or to an address elsewhere will be effective at 9am on the tenth Business Day after it is posted;
- 15.2.3 a fax will be effective one hour after the sending fax machine (or other system) generates a confirmation that the communication has been sent in full (or, if this occurs after 5pm or on a day that is not a Business Day, it will be effective at 9am on the next Business Day); and
- 15.2.4 each communication to the Company will become effective only when actually received by the Company.

16. **GOVERNING LAW**

16.1 **Governing law**

This Deed and any non-contractual obligations arising out of or in connection with is governed by English law.

16.2 **Jurisdiction**

The courts of England have exclusive jurisdiction to settle any dispute arising out of or in connection with this deed (including a dispute regarding the existence, validity or termination of this deed) and any non-contractual obligations arising out of or in connection with it (a “**Dispute**”). Each Party agrees that the courts of England are the most appropriate and convenient courts to settle any Dispute and accordingly neither Party will argue to the contrary. This **clause** is for the benefit of the Enforcement Parties only. As a result, no Enforcement Party will be prevented from taking proceedings relating to a Dispute in any other courts with jurisdiction. To the extent allowed by law, each Enforcement Party may take concurrent proceedings in any number of jurisdictions.

17. **THIS DEED**

17.1 **Execution of this deed - counterparts**

If the Parties execute this deed in separate counterparts, this deed will take effect as if they had all executed a single copy.

17.2 Execution of this deed - formalities

This deed is intended to be a deed even if any Party's execution is not in accordance with the formalities required for the execution of deeds.

17.3 Partial invalidity

17.3.1 If, at any time, any provision of this deed is or is found to have been illegal, invalid or unenforceable in any respect under the law of any jurisdiction, this does not affect the legality, validity or enforceability of the other provisions of this deed, nor the legality, validity or enforceability of the affected provision under the law of any other jurisdiction.

17.3.2 If any Party is not bound by this deed (or any part of it) for any reason, this does not affect the obligations of each other Party under this deed (or under the relevant part).

17.4 Conflict

If there is any conflict between the provisions of the Agreement and the provisions of this deed, the provisions of the Agreement shall prevail.

17.5 Other security

This deed is in addition to, and does not operate so as in any way to prejudice or affect, or be prejudiced or affected by, any other security or guarantee which the Company may now or at any time after the date of this deed hold for or in respect of the Secured Obligations.

17.6 Ownership of this deed

This deed and every counterpart is the property of the Company.

This document is executed as a deed and delivered on the date stated at the beginning of this Deed.

EXECUTION

Executed as a deed by Wrightbus Limited acting by a director and its secretary or by two directors

Director

Director/Secretary

Communications to be delivered to:

Address:

Fax number:

Attention:

Executed as a deed by London Bus Company Limited acting by a director and its secretary or by two directors

Director

Director/Secretary

Communications to be delivered to:

Address:

Fax number:

Attention:

SCHEDULE 21
DEED OF PRIORTY

SCHEDULE 22

FINAL VEHICLE DESIGNS

NBfL –Build Specification



Document Introduction

- The purpose of this document is to define the build specification of the Vehicle.
- The document is split into 13 separate sections which outline the key build areas of the vehicle.
- Available options for Operator configuration are highlighted in yellow boxes.
- Nothing contained within this document precludes the requirements of the specification and the contractual performance obligations as set out in the NBfL Contract between TfL and Wrightbus..
- This document may be subject to ongoing development and that the information contain within this document may be altered, or added to during the project.

Revision History

Revision	Date	By	Comments
A	1/12/10		
B	16/12/10		Updated to reflect MCR Response dated 14/12/10
C	21/1/13		Updated for Production Vehicles

D	15/3/13		Updated Fire Retardancy and CCTV details
---	---------	--	--

Section 1 Vehicle Information

Body Type:	NBFL Double Deck to CUS-02351
Seating Capacity	40 seats, Upper deck 22 seats, Lower deck (includes 4 priority and 6 preferential seat places) 1 Wheelchair passenger
Standees	25
Maximum Capacity	87 passengers
Compliance	Compliant to National Small Series Type Approval

1.1 Vehicle Dimensions

Overall length:	11,232 mm
Overall Height:	4,420 mm
Maximum Overall Width:	2,520 mm
Front Overhang:	2,611 mm
Rear Overhang:	2,621 mm
Wheelbase:	6,000 mm
Step Height (at Ride Height):	315 mm (Doors 1 & 2) 335 mm (Door 3 / Rear Platform)
Step Height (at Kneel)	270 mm (Doors 1 & 2) 335 mm (Door 3 / Rear Platform)
Approach angle	7°
Departure angle	7°
Interior Headroom	1,810 mm (Upper) 2,070 mm (Lower)
Unladen weight	12,000kg

Section 2 Chassis Information

2.1 Chassis Details

Chassis type:	Low floor, Hybrid, double deck
Chassis Model:	WB-NBFL-01
Chassis Frame:	RHS steel tube and channel sections
Corrosion protection:	Anti-corrosion paint system on main chassis frame Removable components, hot dip galvanised
	All closed tubes wax injected Underbody wax applied to all exposed steel work on finished vehicle.
Front Axle:	[REDACTED]
Rear Axle:	[REDACTED]
Tyres:	Front, 315/60/R22.5 Rear, 275/70/R22.5
Suspension:	Pneumatic suspension with rolling type bellows
Kneeling Facility:	Complete N/S kneel
Service Brake:	Disc brakes fitted to all axles WABCO EBS control system with pneumatic back-up
Parking Brake:	Spring loaded brake cylinders on rear axle
Brake Control System:	ABS
Fuel tank:	200 litre aluminium tank with usable capacity of 150 litres.

Fuel fill: Fuel fill located on the offside of the vehicle behind the drivers signal window. The fuel fill is concealed behind a hinged aluminium panel.

Standard Configuration :	Over-centre locking lid covering a standard fill neck.
Option:	Posiloc Identic

Urea Tank: 40 litre plastic tank with approx. usable capacity of 37 litres.

Urea Fill: Standard fill neck secured by a screw cap. The fill point is located on the offside of the vehicle immediately forward of the rear axle. The fill point is concealed behind a hinged access door.

Section 3 Hybrid Driveline

The body structure will be designed to provide direct connection with chassis main frame outriggers.

4.1 Main Body Structure

The main body framework is constructed from "Aluminique" extrusions and is assembled using aluminium castings and forgings. The main body structure extends from the front pillar to the vertical pillar directly behind the rear axle.

Chromate jointing compound will be used when assembling dissimilar metals to prevent electrolytic corrosion.

4.2 Front Framework

The front framework is a combination of bolted and welded steel and aluminique sections making up a safety barrier to give protection to the driver.

The front frame houses the support brackets for the high level wiper rail.

4.3 Rear Module

The rear module is a self-supporting composite structure bolted directly to the main body structure and chassis.

4.4 Roof

The "Aluminique" framework comprises of two full-length cantrails with intermediate framework. A one-piece 19G aluminium roof panel is bonded to the framework to ensure no ingress of water and maximum structural strength.

The roof includes a fibreglass roof pod which covers the roof mounted evaporators and provides an emergency escape route via a break glass panel.

4.5 Interfloor

The interfloor framework is constructed from "Aluminique" extrusions and is assembled using aluminium castings and forgings. It is connected to the sidewall with structural interfloor brackets.

Section 5 Floor Structure

The floor of the vehicle has been designed to provide one step entry on to stepless floor which extends from the front of the passenger saloon to the rear. The aisle shall be ramped slightly over rear axle.

5.1 Lower Deck Floor

The lower saloon floor shall be constructed from three composite materials:

1. Flooring at doors 1 and 2 – 12mm & 15mm polyurethane based Composite board. The composite floor board has a fire Retardancy rating of EC95/28 Annex 4.
2. Main saloon – 12mm high durability plywood with phenolic face manufactured to class 3 fire Retardancy top side and class 2 underside.
3. Rear Gangway – 12mm high durability plywood with phenolic face manufactured to class 3 fire Retardancy top side and class 2 underside.
4. Rear Platform – 40 mm Composite Board, with two skins of epoxy FRP covering foam core manufactured to class 1 fire Retardancy.

5.2 Wheelarches

Manufactured from GRP with reinforcing at all stress points and attachment areas. The wheelarches shall meet class 2 fire Retardancy. The underside of each box shall be protected against tyre burst by a steel inner guard.

5.3 Upper Deck Floor

The upper saloon floor shall be constructed from 12mm plywood manufactured to class 3 fire Retardancy top and bottom.

6.1 Exterior Front End

The front panelling of the vehicle is a five piece sectionalised fibreglass moulding with the lower centre section acting as a hinged door to give access to the demister unit for general maintenance.

The upper windscreen, lower windscreen and destination glass are all bonded in place (see section 7.00 for details of glass).

The exterior fibreglass shall meet class 3 fire Retardancy on the front surface.

6.2 Exterior Rear End

The exterior rear end is formed as a complete rear module. The Module is manufactured from Fibre Reinforced Plastic and incorporates the rear dome and rear gangway floor area. Due to its nature this module, attached to the main body structure, is self supporting and takes away the need for a main substructure. The module is manufactured in five separate pieces to facilitate repair in the event of damage.

The engine access door is a moulded GRP piece. It incorporates an access flap to facilitate oil fill.

6.3 Main Side Panelling

The main side plank fitted below the lower deck windows is a one- piece 2.5mm Aluminique extrusion mechanically fixed to the side framework. The top fixings on these panels are hidden behind a removable rubber infill.

The panelling above the lower deck windows is a sectional, 2mm aluminium panel mechanically fixed to the main framework.

6.4 Side Skirt Panels

The skirt panels are manufactured from 2mm aluminium. All panels are produced in bay lengths. To enable quick turn around time in the event of a side accident the panels are attached using the Quick Lock clamp system at the top and a torx headed bolt at the bottom,.

Access to the 24v batteries, washer bottle and the power steering assembly is facilitated through a hinged panel at the front offside. The panel is top hinged, and secured in the closed position by two locking Southco type latches. When required the panel is held open by a telescopic stay.

The skirt panels also include radiator grills where necessary. The grill is manufactured as a twisted louvre.

Fibreglass finisher shall be applied on the edge of the skirt panel around each wheel.

6.5 Headlamps and Daytime Running Lights

Circular halogen headlamps incorporating side light, dipped and main beam are supplied mounted inside a ring containing 8 LED Daytime running lamps. Sidelights can be powered with the headlight switch on along with the battery master switch. Main and dipped beam can only be achieved with the ignition switch in the on position.

6.6 Front Indicators

A low level circular indicator unit shall be supplied adjacent to the headlight units.

6.7 Front Marker Lights

Two LED outline marker lights shall be fitted at the top outside edges of the front lower screen. Colour – White

6.8 Side Indicators

N/S and O/S LED indicator units shall be fitted in the main side plank adjacent to the front of the vehicle.

6.9 Taillights

Three LED light units shall be fitted vertically in the lower corner section on both the N/S and the O/S of the vehicle. The top light on each side shall act as a rear indicator, the middle light as both taillight and brake light. The bottom light of the cluster shall act as reversing lights.

6.10 Rear fog light

A fog light shall be mounted on the O/S of the rear number plate.

6.11 High Level Rear Light

A high level rear brake light shall be mounted on the upper rear dome above the window. The LED light shall be located on the centreline of the vehicle.

6.12 Rear Marker Lights

Two LED outline marker lights shall be fitted at the top outside edges of the rear dome. Colour – Red.

6.13 Reflectors

14 reflector plates shall be fitted at various low level locations around the vehicle to meet legal requirements.

6.14 Number Plate Lights

The rear number plate, fitted at the rear bumper, shall be illuminated by two LED light units.

6.15 Number Plates

Number plates shall be supplied and fitted at the front and rear bumpers. (NB customer to notify registration details)

6.16 Driving Mirrors and Arms

The N/S mirror shall be mounted on an extended arm and be viewed through the front screen. The O/S mirror shall be mounted on an arm located at the front pillar and viewed through the drivers signal window. Arms shall be black, twin tube, nominally 28mm diameter to provide maximum stability and strength. Mirror heads to be black.

6.17 Windscreen Wipers

A "Heavy duty" wiper system is mounted at the top of the lower windscreen. The wiper system is set to wipe the maximum amount of screen (approx 58%) to give the best vision to the driver in poor conditions. The wiper system is driven by a heavy-duty motor accessed via a panel in the upper front bulkhead.

Control via steering column stalk to give intermittent, slow and fast speed settings.

6.18 Windscreen Washer

A 6.7 litre reservoir shall be located below the driver's cab floor area and shall be topped up by a fill neck located behind the battery access panel located at the O/S front of the vehicle.

The washer jets are mounted on the windscreen wipe arm.

6.19 Fluid indicator

An LED fluid indicator shall be positioned behind the fuel fill access panel. The indicator will notify workshop personnel if the vehicle is low on coolant, oil or screen washer fluid.

6.20 Towing

A threaded towing block for a 1" BSP towing eye shall be mounted to the front chassis cross member. The blocks shall be accessed by removing the centre portion of the front bumper.

Air charge points shall be located in the vicinity of the towing eye.

6.21 Mud-flaps

Mud-flaps shall be fitted to the rear of all wheelarches.

6.22 Branch deflector

A branch deflector shall be provided at the upper N/S front corner.

Material: Stainless Steel
Finish: Black

6.23 Reverse Alarm

A reverse alarm shall be fitted with a timed override switch in the cab.

6.24 Assault Alarm

An assault alarm shall be mounted within the front dash area. The alarm shall be activated by a button on the driver's offside console.

6.25 Fire suppression

A fully automatic fire suppression system shall be fitted in the main engine bay. Prior to activation of the system any fans in this area should be locked stationary and the engine should shut down within 10 seconds of activation. The fuel system to the engine bay will also be cut off on activation of the system. The driver will automatically be notified if the system is activated.

Make: XXXXXXXXXX

6.26 Battery Charge Point

The vehicle shall be equipped with a Griptone battery charge point which is accessed within the drivers cab.

6.27 Engine Oil Dip and Fill

The engine oil dip and fill shall be located on the offside of the vehicle at the rear corner. These shall be accessed through a flap on the engine door

6.28 Coolant

The coolant fill points shall be located on the offside of the vehicle, above the main radiator.

6.29 Emergency Engine Stop

The emergency engine stop is fitted behind the engine oil dip and fill flap.

6.30 Paint finish -

Body - Red – DG FLT.00285
Highlight – Black – RAL 9005 DN DG
Roof – White - WRB.*0130 DN DG
Wheels – Indian Red – to match HMG F2605

6.31 Exterior Labels

Ref Stewart Signs Kit
All labels, signage and layout is to TfL approved design.

The glass throughout the vehicle shall meet all legal requirements and shall be identifiable by an E Mark on the interior of the glass.

7.1 Front Screen

There are 3 separate front screens all bonded in position and manufactured from 6mm laminated glass. The lower and destination screens, are manufactured from clear glass, while the upper screen is tinted automotive green with 80% light transmission. The upper screen is manufactured in 3 pieces and is jointed by alloy jointing strips.

7.2 Main Saloon

All saloon glass on both the upper and lower decks of the vehicle shall be toughened safety glass. The glass shall be bonded in position and shall be tinted automotive green with 80% light transmission.

No hoppers units shall be fitted.

Two windows on the upper saloon and two windows in the lower saloon shall be designated as emergency escape windows. These windows shall be fitted with a safety punch device.

7.3 Rear Window

The rear screen shall be manufactured in 3 separate pieces from laminated glass. The glass shall be bonded in position and shall be tinted automotive green.

7.4 Drivers Window

A drivers signalling window shall be a flush fitting unit with two sliding windows. The unit shall be bonded with clear glass. The main glass shall be 4mm, the sliding units shall be 10mm "Bandit Glass". Both glass units shall be tinted automotive green with 80% light transmission

7.5 Escape hatch

A break out escape hatch shall be provide in the mid upper saloon roof area to meet required legal regulations. The glass shall be toughened glass which has been blacked out. The escape hatch glass is broken by means of a safety punch.

Access to the escape hatch is via a sacrificial ceiling panel with concealed push out hand holds to facilitate removal when required.

7.6 Anti-Vandal Film

An anti vandal film is applied to all passenger windows. The 100 micron, clear, polyester film has a scratch resistant coating.

The vehicle shall be equipped with three areas for entering and exiting. The vehicle has been configured such that it can operate in one of two modes; either as a three door vehicle where all three doors are under the control of the driver. Or with an open rear platform in which case the driver is assisted by a crew member located at the open platform.

8.1 Door 1

Located at the front of the vehicle shall be a Ventura inward gliding door with a clear opening between handpoles of 1110mm. The door shall be of electro/pneumatic operation and be fitted with a full depth clear toughened glass.

8.2 Door 2

Located mid wheelbase it shall be a Ventura double leaf sliding plug door with a clear opening of 1110mm. The door shall be of electro/pneumatic operation and be fitted with a full depth clear toughened glass.

8.3 Door 3

The rear platform area shall be equipped with a Ventura two leaf door which can be configured to operate in 2 modes:

- 1) As an open platform with both the front and rear door leaves locked in the open position.
- .2) As a functional door, operated from the drivers cab. In this mode the rear leaf will be locked closed and the front leaf shall operate as an inward gliding door leaf.

Both the front and rear leaves are held in position using air pressure. In addition the forward leaf includes a latch to locate the door in the open position.

8.4 Change-over of door 3 to open platform

The driver and crew member shall be able to change over the configuration of the vehicle. This is a two man operation requiring the driver to begin the sequence by pressing a 'crew' button on the side console and the crew can complete the sequence with an 'unlock' button housed within the switch panel at the rear platform.

8.5 Driver's Door controls

The doors shall be operated by push buttons housed on the driver's side console. There shall be a single button which shall open all available doors, and an individual button to close each door.

The door status is visible within the drivers DMUX screen

8.6 Crew Controls

The crew shall be provided a 'drive', 'alert' and 'unlock' buttons located within recessed housing at the rear platform. When in Driver only mode the switches shall have no function.

8.7 Interior Emergency Controls

Emergency open/close buttons shall be located on the door shelf plate cover. The buttons for doors 1 and 2 shall be located behind individual hinged flaps. The buttons shall be of pneumatic operation.

8.8 Platform Lights

Each platform shall be illuminated by recessed spotlights, which are controlled by the door being open or closed.

8.9 Entry ramp

A power ramp will be fitted at door 2 to assist wheelchairs and disabled passengers. The ramp shall be stowed below the floor area and shall be recessed 35mm from the exterior body work. The ramp shall be only capable of being deployed when the vehicle has stopped, the driver engaged the parking brake and the door is closed. Once deployed the ramp shall activate an interlock which will prevent the release of the park brake until the ramp has been retracted.

The ramp will be fitted with an audible warning device that should not exceed a noise level of 75db(A). This shall sound in conjunction with flashing amber lights located on the side panels adjacent to the door.

The manual release tool is located on the floor behind the driver's seat.

Make and Model : XXXXXXXXXX

8.10 Audible warning

When door 2 or the rear platform door are closing an audible warning device will sound that should not exceed a noise level of 75db(A).

Section 9 Interior Finish

The interior of the New Bus for London has been specifically design to complement the dramatic exterior.

9.1 Floor covering

The main saloons of the vehicle shall be fitted with anti-slip floor-covering with the minimum number of joints.

Colour – as per reference sample
Fire Retardancy -EEC 95/28.

The front and rear entrance areas, as well as the treads and risers on the two staircases and the luggage pen shall be finished with cork resin based flooring material. The cork material is finished with a machined groove pattern.

Colour – as per reference sample
Fire Retardancy –Class Two.

9.2 Step Edging

All the step edgings shall be Aluminium fitted with yellow infill.

9.3 Sidelining

On the upper deck easy clean laminate shall be fitted to the sidewall below the window line.

Colour Reference : as per colour reference sample.
Fire Retardancy: Class One and EC 95/28 annex 4

On the lower deck fibreglass moulding shall by used below the window line.

Colour Reference : RAL 3005.
Fire Retardancy: Class Two.

9.4 Cove Panels

All coves shall be manufactured from GRP and each cove will be individually hinged to give access if needed to any component housed behind it. There shall be an ABS infill strip forming a highlight feature along the length of the cove. This infill also functions as the AC vent.

Cove Colour: RAL 7044
Cove fire Retardancy: Class Two

Infill Colour: RAL 3005

Infil fire Retardancy: UL94V0

9.5 Centre roof

Centre roof panels shall be manufactured from perforated aluminium sheet and will have acoustic material mounted in the void behind them to reduce the interior noise levels of the vehicle.

Colour Reference : RAL 7044

9.6 Window cappings

The vertical window cappings shall be an ABS trimmed part, fire Retardancy meets UL94V0

Colour Reference : RAL 7044

Fire Retardancy :UL94V0

The lower horizontal capping shall be a two piece PCV extrusion.

Colour Reference : RAL 3005

Fire Retardancy: EC 95/28 annex 4

The upper horizontal capping shall be a one piece PCV extrusion.

Colour Reference : RAL 7044

Fire Retardancy: EC 95/28 annex 4

9.7 Upper Deck Front Bulkhead

The upper deck front bulkhead shall be manufactured from GRP.

Bulkhead Colour: RAL 7044

Fire Retardancy: Class Two.

The front bulkhead shall incorporate the iBus monitor and will feature an ABS infil strip matching the coves.

Infill Colour: RAL 3005

Infil Fire Retardancy: UL94V0

9.8 Front Destination Housing

The front destination housing on the upper deck shall be fitted with two access doors to provide access to the equipment behind. The smaller door on the O/S provides access to an electrical panel and the wiper motor. The larger door provides access to the front destination screen

The doors shall be locked with a SouthCo type fast-lead screw requiring a triangular key to operate.

Colour Reference : RAL 3005

Fire Retardancy- Class Two

9.9 Upper Deck Rear Bulkhead

The upper deck rear bulkhead incorporates the rear seat box and rear staircase partition. There are two access panels to provide access to the heater box and air chill condenser which are located behind the bulkhead. The access doors are locked required a triangular SouthCo key to operate.

Colour Reference : RAL 7044

Fire Retardancy : Class Two

9.10 Upper Deck Pulpit

The front stair well is protected through the use of a fibreglass pulpit which encompasses the main electrical centre located behind a locked access door

The doors shall be locked with a SouthCo type fast-lead screw requiring a triangular key to operate.

Colour Reference : RAL 3005

Fire Retardancy- Class Two

9.11 Seat boxes

The first seat forward of the both the front and rear staircases is mounted on a seat box . These units are used to house additional electrical equipment, such as the CCTV DVR. The doors shall be locked with a SouthCo fast-lead screw requiring a triangular key to operate.

Colour Reference : RAL 3005

Fire Retardancy: Class Two

9.12 Lower Deck Front Bulkhead

The lower deck front bulkhead shall be a fibreglass part which connects the door head cover of door 1 to the drivers overhead console. .

Colour Reference : RAL 7044 and infill RAL 3004

Fire Retardancy: Class Two

9.13 Door Head covers

The Door head cover above each entrance door shall house all the workings of the shelf plate. It shall be manufactured from GRP and shall lift away to give easy access to the door gear components. It shall be secured by two Southco quick release fasteners.

Doorhead Colour: RAL 7044
Cove fire Retardancy: Class Two

Infill Colour: RAL 3005
Infill fire Retardancy: UL94V0

9.14 Interior Mirrors

Two mirrors shall be fitted centrally to the front bulkhead. These shall permit the driver a view of both the wheelchair area and door 2 through the use of two 10" convex mirrors located within the saloon.

9.15 Fire Extinguisher

A fire extinguisher to EEC BSEN3 standard shall be supplied and fitted behind glass in the N/S cove directly behind the door 1. The extinguisher shall be accessible from the saloon area.

9.16 Licence Holder

A double licence holder shall be fitted to the front N/S pillar. It shall be situated in an area where it is easily readable from outside the vehicle.

9.17 Saloon lights

Lighting in the main saloon areas shall be provided by a series of LED spot lights recessed into the roof coves. Saloon lights shall have the ability to be turned on/off manually by the driver or work automatically using 'smart sensors' depending on the ambient light level.

9.18 Staircases

A forward facing, straight, 9 step staircase, manufactured from GRP shall be provided at the front of the saloon.

Colour Reference: RAL 3005
Fire Retardancy: Class Two

A turned staircase shall be provided at the rear of the vehicle. The staircase shall be manufactured from GRP.

Colour reference: RAL 3005
Fire Retardancy: Class One

9.19 Seating

Seating supplied to layout CUS-02351. Seating to meet all legally required dimensions. Meets Crib 7

Make: Rowan Telmac
Model: NBfL
Moquette: Camira NBfL
Frame Colour: Metallic Black
Back Rest Colour: Dark grey

9.20 Wheelchair Location

A wheelchair bay of minimum 1500mm long shall be provide as far forward as possible on the O/S low flat floor area.

Padded backrest to be integrated into the saloon side of the staircase partition.

The wheelchair bay shall be designated through the use of a white border and a white wheelchair logo.

Offside horizontal handrail incorporates the wheelchair signal bell push.

9.21 Handpoles

Handpoles shall be manufactured from 35mm diameter, smooth mild steel, and coated with a non slip finish. Handpoles supplied as per drawing CUS-02351 to meet all legal requirements.

Colour Reference: as per reference sample

9.22 Bell pushes

Positioned as shown in drawing CUS-02351. NBfL bespoke design

9.23 Bus Stopping

Three bus stopping signs are incorporated as part of the IBUS system. One screen is located on the upper deck facing rearward. Two are fitted on the lower deck one facing forward and one facing rearward.

9.24 Crew Locker

A locker shall be provided at the rear platform area for a 2nd crew member. This will secured by means of a SouthCo type lock requiring a square key.

9.25 Smoke detectors

A concealed smoke detector shall be provide in the upper deck rear seat area

and shall be linked to an audible warning in the driver's cab.

9.26 Emergency Isolator

Fitted in cab

9.27 Luggage area

Over nearside front wheelarch, finished with cork type flooring material and fitted with a guard rail.

Section 10 Drivers Compartment

10.1 General

GRP mouldings shall form a totally integrated design incorporating front bulkhead, heating and ventilation instrument console, switches, controls and ticket equipment plinth. The rear of the cab area shall be formed by the staircase closure panel.

10.2 Cab Door

Double skinned, and complete with lockable door latch top security latch and full height assault screen incorporating speech holes. The screen is to be manufactured from an approved polycarbonate.

10.3 Assault screen

A full height screen mechanically secured top and bottom will run from the cab door assault screen to the front N/S pillar to fully enclose the drivers cab area. The screen shall hinged from the NS pillar to allow access for cleaning. Access is provided through the screen for the driver's ticket machine/validator. The screen is to be manufactured from an approved polycarbonate. The screen is locked into place with electro-magnetic catches, the release switch is positioned in the driver's cab.

10.4 Drivers Seat

Standard: Chapman Nova Urban Drivers seat moquette trimmed. Seat equipped with:

- Recline mechanism
- Lumbar support
- Non-heated
- Double locking slides
- Mounted on a pedestal and a mechanical suspension unit

Moquette Colour Reference: TBC

Option : Leather in place of moquette

Option: Operator specific drivers seat

10.5 Drivers Controls

The ceiling of the drivers cab shall incorporate the radio equipment, iBus controller, destination controller, additional switches, microphone, speaker and monitors required by the driver. Additional regularly used switches etc. shall be mounted on either the driver's side console or around the dash console. All switches shall be within easy reach of the driver.

10.6 Cab lighting

LED spot lights provided to give light to the driver and specifically to the ticket machine area. The lights shall be wired through the entrance door micro switch and also a separate switch on the instrument panel to allow either automatic operation, when the sidelights are on, or manual operation by the driver.

10.7 Sun Visor

A 1 metre wide x 600mm drop sun visor shall be provided for the driver.

10.8 Coat Hook

A double coat hook shall be fitted at the rear of the drivers cab area.

10.9 Cab Bell

A bell, combined with warning light, will be fitted in the drivers cab area and shall operate in accordance with legal requirements when a saloon bell push is pressed. The bell shall ring only once in the cab, subsequent bell pushes to illuminate warning light but bell to ring only in passenger compartment

10.10 Night Lights

When the master switch is turned off the entrance and cab lights will come on for a 1-minute period to allow the driver to leave the vehicle safely at night. The lights shall also come on when the master is switched off and the exterior entrance door button is activated.

10.11 Cash Handling

A cash tray shall be provided on the top of the drivers cab door together with provisions for attaching a cash bag on the inside of the cab door.

Section 11 Ticketing, CCTV & Communication Equipment

11.1 Ticket Equipment

Provision shall be made to mount TfL supplied ticket machine and Oyster validator equipment at the drivers cab area.

Three remote oyster card readers shall be supplied by TFL and shall be mounted at each entrance/exit door areas, as defined on CUS-02351

11.2 Communication

A passenger announcement system shall be provided to be used by the driver . The equipment shall be supplied as part of the Free issue iBUS system. A cable shall be fitted between the PA and the conductors area for future expansion.

Four discrete speakers shall be supplied in each saloon.

Induction loops (T band) shall be provided to allow passengers with hearing aids to hear clearly the PA or iBUS systems.

11.3 CCTV

CCTV camera layout as per drawing reference: CUS-2680. There are two options for the position of the camera recording the cab view. Operator can specify which position is required.

The Operator shall be responsible for selecting the CCTV equipment. This must be compatible with the technical requirements set out in Attachment 14 of the current Operational Performance Specification published by TfL.

11.4 Drivers Surveillance

Fitted to meet legal requirements. The cameras shall function when the master switch is on and shall be viewed from two monitors mounted in the drivers cab roof.

The Operator shall be responsible for selecting the Driver's Surveillance equipment. The operator is responsible for any consequential costs due to modifications required if the selected equipment does not fit in the provided location.

11.5 Passenger Monitors

Two passenger viewable 10in monitors are to be fitted into the lower deck. These will cycle between camera views. Position as follows:

1. In the inward facing access panel of the front staircase
2. In the conductors locker door at the rear staircase.

The Operator shall be responsible for selecting the Passenger Monitors equipment. The operator is responsible for any consequential costs due to modifications required if the selected equipment does not fit in the provided location

11.6 iBus

iBus system shall be provided by TfL and installed into the vehicle. The system comprises:

- 1) Drivers Control Unit – located on the drivers overhead console
- 2) Lower Deck Rear facing Sign – Located and integrated on the rear wall of the front staircase partition
- 3) Lower Deck front facing sign – Located in a bespoke unit located forward of the rear platform
- 4) Upper Deck Sign – Located and integrated into the upper deck front bulkhead
- 5) Main Unit – Located in the front seat box

Section 12 Destination Equipment

Destination equipment shall be fitted to the vehicle, comprising :

12.1 Front

A power operated blind, LED lit, destination and route number unit shall be fitted above the front windscreen screen.

12.2 Side

A power operated blind, LED lit, destination unit shall be fitted at the front door at the top of the adjacent window bay.

12.3 Rear

A power operated blind, LED lit, route number unit shall be fitted behind the saloon window on the centre line of the vehicle.

12.4 Signage

All display signage will meet as a minimum the size requirements given in Attachment 13 to TfL's Operational Performance Specification. Text shall be in TFL classic Johnston bold font, white text on black background. The vehicles will be supplied with route specific destination blinds fitted, subject to information being supplied in time.

12.5 Control Unit

Destination and Route Controller, fitted in the driver's overhead console.

Section 13 HVAC Equipment

13.1 Cab Heating

A heavy duty, twin speed air blend heating and demisting unit incorporating an air filter shall be supplied. The unit will also act as drivers A/C. Air will be ducted to the front screen and cab area via a combination of vents and eyeballs in the front dash area. The unit shall be powered only when the ignition is on. Maintenance access is through the centre front bumper section, which can be hinged or detached if necessary.

13.2 Saloon heating/ cooling

The vehicle shall be heated by a twin blower system fitted in the upper saloon. The upper deck shall be heated by a fresh air blower situated at the rear seat box and blowing air down the N/S floor vent. The lower deck shall be heated by a blower mounted below one of the upper deck seats blowing re-circulated air into the O/S roof cove duct.

Upper deck cooling shall be provided when necessary by an 11KW, A/C system blowing cooled air through roof cove vents on both the N/S and O/S of the vehicle.

Temperatures shall be controlled in each saloon by separate thermostatic controls which will turn heating and cooling systems on automatically when required by the set temperature limits. Limits and Performance are outline in contract PRO1632.

Appendix A Vehicle Images



Summary Spec iss d
images.pdf