

Dated

10th May

2019

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

Supply and Purchase of Hydrogen Buses and associated Services

Reference: tfl_scp_001548_co01

CALL-OFF PURCHASE AGREEMENT

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THIS CALL-OFF PURCHASE AGREEMENT is made on

10th May 2019

Between

- (1) **LONDON BUS SERVICES LIMITED** ("the Authority" or "LBSL") a company registered in England and Wales (No 03914787) a statutory corporation whose principal office is at 55 Broadway, London, SW1H 0BD; and
- (2) **WRIGHTBUS LIMITED** (the "Supplier"), a company registered in United Kingdom (Registered Number NI006119) whose registered office is at Galgorm Industrial Estate, Fenaghy Road, Ballymena, Co. Antrim, BT42 1PY.

GENERAL PROVISIONS

1. DEFINITIONS AND INTERPRETATIONS

- 1.1 In these terms and conditions, the following words and expressions have the meanings as set out below:

"Acceptance"	means, in respect of any Vehicle, that such Vehicle has been Accepted;
"Acceptance Certificate"	means an acceptance certificate substantially in the form set out in Schedule 6 of this Call-Off Purchase Agreement;
"Acceptance Date"	means, in respect of any Vehicle, the date specified as the "Acceptance Date" in an Acceptance Certificate in respect of such Vehicle that has been executed by the Contracting Authority;
"Accepted"	means, in respect of any Vehicle, that an Acceptance Certificate has been executed by the Contracting Authority;
"Breakdown"	means a mechanical, electrical or other failure rendering a Vehicle inoperative and which is not due to an accident;
"Call-Off Purchase Agreement"	means this agreement and all Schedules to this agreement which has been entered into by the Contracting Authority and the Supplier pursuant to the Framework Agreement;
"Charges"	means: <ol style="list-style-type: none">a) the fixed charges payable in respect of the purchase of Vehicles and supply of Services calculated in accordance with the Pricing Schedule and set out in Schedule 3 of this Call-Off Purchase

Agreement; and

- b) the prices agreed for Spare Parts in accordance with Clause 8 and Schedule 8

“Commencement Date”	means the date specified in Schedule 4 of this Call-Off Purchase Agreement;
“Confidential Information”	means any information which has been designated as confidential by either Party in writing or that ought to be considered as confidential (however it is conveyed or on whatever media it is stored) including information which relates to the business, affairs, properties, assets, trading practices, Vehicles, developments, trade secrets, Intellectual Property Rights, Know-how, personnel, customers and suppliers of either Party;
“Contracting Authority’s Group”	means the Contracting Authority and all its subsidiaries (as defined in section 1159 of the Companies Act 2006) from time to time together and reference to any “member of the Contracting Authority’s Group” shall refer to the Contracting Authority or any such subsidiary;
“Contracting Authority Manager”	means the person notified as such by the Contracting Authority to the Supplier from time to time;
“Contracting Authority Technical Manager”	means the person notified as such by the Contracting Authority to the Supplier from time to time;
“Contract Information”	(i) The Call-Off Purchase Agreement in its entirety (including from time to time agreed changes to the Call-Off Purchase Agreement) and (ii) data extracted from the invoices submitted pursuant to Clause 9 which shall consist of the Service Provider’s name, the expenditure account code, the expenditure account code description, the document number, the clearing date and the invoice amount
“Declaration of Ineffectiveness”	means a declaration of ineffectiveness in relation to this Call-Off Purchase Agreement made by a Court of competent jurisdiction pursuant to Regulation 98 of the Public Contracts Regulations 2015 or Regulation 113 the Utilities Contracts Regulations 2016;
“Delivery Location”	means the site or premises specified in the

	Delivery Plan, or such other address as may be mutually agreed by the Parties in writing;
“Delivery Plan”	means the plan detailing the timeframes and other arrangements for delivery of the Vehicles as attached at Schedule 5 of this Call-Off Purchase Agreement;
“Framework Agreement”	<p>means the agreement (as amended from time to time) entered into by the Supplier and the Authority in relation to the supply of any of the following:</p> <ul style="list-style-type: none"> a) Vehicles; b) Services, <p>and where there is more than one Framework Agreement, reference to a “Framework Agreement” shall be to the Framework Agreement that includes a Statement of Requirements covering the relevant Vehicles and Services identified above;</p>
“Good Industry Practice”	means the exercise of that degree of skill, diligence and foresight which would reasonably and ordinarily be expected from a skilled and experienced operator engaged in the same type of business as the Supplier under the same or similar circumstances;
“Intellectual Property Rights”	means patents, inventions, trade marks, service marks, logos, design rights (whether registrable or otherwise), applications for any of the foregoing, copyright, database rights, domain names, trade or business names, moral rights and other similar rights or obligations whether registrable or not in any country (including but not limited to the United Kingdom) and the right to sue for passing off;
“Know-how”	means the application of knowledge, information or techniques in the manufacture or service/repair of the Vehicles;
“Operating Information”	means the operating manual, maintenance and service manual, spare parts catalogue and similar operating and maintenance instructions for the Vehicles, including such information specified in the Statement of Requirements, together with all such other documentation which is necessary for the Contracting Authority to understand the Vehicles, Services and Spare Parts and all information as may be necessary for the safe and proper use, maintenance and

	repair of the Vehicles and all such other documentation relating to the Vehicles, Services and Spare Parts that is reasonably requested by the Contracting Authority from time to time;
“Party”	means a party to this Call-Off Purchase Agreement and “Parties” shall be construed accordingly;
“Payment Milestones”	means the progress payment amounts and times set forth in Schedule 3 for payment of the Charges to the Supplier;
"Pre-Existing Intellectual Property Rights"	means any Intellectual Property Rights vested in or licensed to the Contracting Authority or the Supplier prior to or independently of the performance by the Contracting Authority or Supplier of their obligations under this Call-Off Purchase Agreement;
“Pre-Delivery Inspection”	has the meaning in Clause 7.1;
“Pre-Delivery Inspection Report”	means the inspection report substantially in the form set out in Schedule 5 which shall be issued by the Contracting Authority in acceptance of the Pre-Delivery Inspection for any Vehicle;
“Pricing Schedule”	means the schedule referred to as such in the Framework Agreement;
“Regulatory Bodies”	means those government departments and regulatory, statutory and other entities, committees and bodies which, whether under statute, rules, regulations, codes of practice or otherwise, are entitled to regulate, investigate, or influence the matters dealt with in this Call-Off Purchase Agreement or any other affairs of the Contracting Authority and “Regulatory Body” shall be construed accordingly;
“Service Level”	means the standards of performance and delivery relating to the supply of Vehicles and Services as set out in Schedule 4 of this Call-Off Purchase Agreement;
“Services”	means any service in respect of the repair, support and maintenance of the Vehicles (including, as necessary, the supply of Spare Parts) which the Supplier is required to provide under this Call-Off Purchase Agreement and which is described in the Statement of Requirements;
“Spare Parts”	means replacement components for use in the

	Vehicles;
“Spare Parts Warranty”	The warranty relating to the Spare Parts set out in Schedule 8;
“Statement of Requirements”	means the document describing the Vehicles and Services to be provided under this Call-Off Purchase Agreement as set out in Schedule 1 and Schedule 2 attached to this Call-Off Purchase Agreement;
“Supplier”	means the supplier of the Vehicles and Services (if relevant) with whom the Contracting Authority enters into this Call-Off Purchase Agreement and who is a Party to a Framework Agreement in respect of the provision of Vehicles and Services;
“Supplier’s Representative”	means such other person as may be agreed by the Parties from time to time;
“Supplier’s Site”	means the site or premises where the Vehicles (or any part) shall be manufactured;
“Term”	means the period of this Call-Off Purchase Agreement, as set out in Clause 3.1;
“VAT”	means value added tax as provided for in the Value Added Tax Act 1994 and any other tax of a similar nature;
“Vehicles”	means the vehicles within the scope of the Framework Agreement and as described in the Statement of Requirements contained in Schedule 1 of this Call-Off Purchase Agreement;
“Vehicle Operator”	means a third party company under contract with the Contracting Authority to operate bus services from time to time, or any third party who in the ordinary course of its business provides buses to such operators;
“Vehicle Warranty”	The warranty relating to the Vehicles set out in Schedule 8;
“Working Days”	means any day excluding (i) Saturdays, Sundays or public and bank holidays in England or in the Supplier’s country of operation and (ii) industry recognised seasonal business closures;
“Working Hours”	means the hours of 8.30 am to 5.00 pm (inclusive) on any Working Day;
“Year”	means a calendar year.

- 1.2 The interpretation and construction of this Call-Off Purchase Agreement shall be subject to the following provisions:

- 1.2.1 the terms and expressions set out in Clause 1 shall have the meanings ascribed therein;
- 1.2.2 words importing the singular meaning include where the context so admits the plural meaning and vice versa;
- 1.2.3 words importing the masculine include the feminine and the neuter;
- 1.2.4 the words “include”, “includes” and “including” are to be construed as if they were immediately followed by the words “without limitation”;
- 1.2.5 references to any person shall include natural persons and partnerships, firms and other incorporated bodies and all other legal persons of whatever kind and however constituted;
- 1.2.6 where there is a provision for any notification, consent or approval to be given under this Call-Off Purchase Agreement such notification, consent or approval shall only be valid if given in advance and in writing;
- 1.2.7 references 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 replaced by any subsequent enactment, modification, order, regulation or instrument as subsequently amended or re-enacted;
- 1.2.8 headings are included in these Clauses for ease of reference only and shall not affect the interpretation or construction of this Call-Off Purchase Agreement;
- 1.2.9 references to Clauses and Schedules are references to Clauses and Schedules of and to this Call-Off Purchase Agreement and references to paragraphs are, unless otherwise stated, references to paragraphs of the Schedule in which the reference appears;
- 1.2.10 in the event and to the extent only of any conflict between terms in the main body of this Call-Off Purchase Agreement and the terms of the Schedules, the terms in the main body of this Call-Off Purchase Agreement shall prevail over the remainder of the Schedules.

Call-Off Purchase Agreement

- 1.3 The terms and conditions of the Framework Agreement shall be incorporated into this Call-Off Purchase Agreement.
- 1.4 Any terms which are not separately defined within this agreement shall have the meanings given in the Framework Agreement.

2. APPOINTMENT OF SUPPLIER

- 2.1 The Supplier agrees to sell and the Contracting Authority agrees to purchase the Vehicles in accordance with the terms of this Call-Off Purchase Agreement.
- 2.2 The Supplier shall perform the Services set out in Schedule 2 of this Call-Off Purchase Agreement during the Term in accordance with the terms of this Call-Off Purchase Agreement.
- 2.3 If and when requested by the Contracting Authority, the Supplier shall make available to the Contracting Authority the Spare Parts in accordance with the terms of this Call-Off Purchase Agreement.

3. DURATION OF THE CALL-OFF PURCHASE AGREEMENT

- 3.1 Unless terminated in accordance with the terms of this Call-Off Purchase Agreement, this Call-Off Purchase Agreement shall take effect on the Commencement Date and shall continue until completion of the supply of Vehicles, Services and any Spare Parts by the Supplier (the "Term").

4. WARRANTIES

General Warranties

- 4.1 The Supplier warrants that it shall manage and perform this Call-Off Purchase Agreement and supply the Vehicles, Spare Parts and Services:
 - 4.1.1 in accordance with the Statement of Requirements;
 - 4.1.2 in accordance with the terms and conditions of this Call-Off Purchase Agreement;
 - 4.1.3 in accordance with Good Industry Practice;
 - 4.1.4 in accordance with the Delivery Plan;
 - 4.1.5 with appropriately experienced, qualified and trained personnel exercising all due skill, care and diligence; and
 - 4.1.6 in compliance with all applicable Laws.
- 4.2 The Supplier warrants and represents that:
 - 4.2.1 it has the full capacity and authority and all necessary consents (including but not limited to, where its procedures so require, the consent of its Holding Company) to enter into this Call-Off Purchase Agreement and that this Call-Off Purchase Agreement is executed by a duly authorised representative of the Supplier;
 - 4.2.2 it is not in default in the payment of any due and payable taxes or in the filing, registration or recording of any document or under any

legal or statutory obligation or requirement which default might have a material adverse effect on its business, assets or financial condition or its ability to observe or perform its obligations under this Call-Off Purchase Agreement.

- 4.3 The Supplier shall provide the Contracting Authority, if so reasonably requested by the Contracting Authority, with the name, role and details of relevant work experience of all persons who are employed in performing the Services. The Parties agree that in handling such information they shall comply with any relevant obligations under Data Protection Legislation.

Limited Warranties

- 4.4 The Supplier warrants that the Vehicles supplied to the Contracting Authority will comply fully with the Vehicle Warranty and that the Spare Parts will comply fully with the Spare Parts Warranty.

Warranty Exclusions

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

- 4.5.1 external causes such as road accidents, scratches, and similar events (howsoever caused);
- 4.5.2 the neglect or failure to ensure that the Vehicles are inspected, serviced or maintained in accordance with Supplier's prior written recommendations (including recommended daily checks, use of spare parts and use of proper coolants) received by the Contracting Authority;
- 4.5.3 vandalism;
- 4.5.4 overloading, operation other than in accordance with the Supplier's prior written recommendations received by the Contracting Authority; or
- 4.5.5 any abuse or misuse by the Contracting Authority (or its employees, agents, or service providers (other than the Supplier)).

- 4.6 The Vehicle Warranty and the Spare Parts Warranty shall be made by the Supplier to the Contracting Authority in accordance with the terms of this Clause 4 and are transferable to Vehicle Operators on written notice by the Contracting Authority to the Supplier in respect of the applicable Vehicle. The Supplier reserves the right to inspect any such Vehicle prior to any transfer.

- 4.7 Repair Procedure for Warranty Claims

- 4.7.1 The Supplier shall be financially responsible for all repairs (including any necessary replacements as the Supplier may

reasonably determine) covered by the Vehicle Warranty, the Spare Parts Warranty and shall also be responsible for performing all repairs (including any necessary replacements) in a timely fashion in accordance with this Clause 4.7. The Supplier may enter into an agreement with a local agent for the actual performance of warranty repairs, and if the Supplier enters into such an agreement, the references to Supplier in this Clause 4.7 shall be deemed to be a reference to that local agent. Notwithstanding any such agreement, the Supplier shall retain full legal and financial responsibility for warranty-covered repairs.

4.7.2 If the Contracting Authority (or the Supplier when performing services) detects a defect with a Vehicle within the applicable warranty period, the Contracting Authority (or the Supplier if the Supplier is first to detect the defect) shall promptly notify the Supplier using such notification system as specified by the Supplier (or notify the Contracting Authority if the Supplier is the first to detect the defect) of the defect. Within five (5) Working Days after such notification, the Supplier shall either:

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

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

4.7.2.3 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 Supplier within the period of five (5) Working Days from the date of notification, in which case it shall provide its response as to warranty coverage within two (2) Working Days after such inspection has been completed,

provided always that the Supplier shall act reasonably in all circumstances.

4.7.3 If the Supplier agrees under Clause 4.7.2.1 that the noticed defect is covered by the relevant Vehicle Warranty, Spare Parts Warranty or other warranty then the Supplier shall begin warranty repair work within five (5) Working Days after identifying or receiving notification of the defect. If the Supplier agrees that the noticed defect is covered by the relevant Vehicle Warranty, Spare Parts Warranty or other warranty after an inspection under Clause 4.7.2.3, then the Supplier shall begin warranty repair work within two (2) Working Days after completion of such inspection.

4.7.4 The Contracting Authority shall use all reasonable efforts to make the Vehicle available to facilitate the completion of repairs within the Supplier's repair schedule and such schedule is to be agreed in

advance by the Contracting Authority. The Supplier shall provide at its own expense, all necessary parts, or subassemblies required for the repair. The Supplier shall determine, in its discretion, whether a Vehicle part or subsystem should be repaired or replaced.

- 4.7.5 If the Supplier (acting reasonably) disagrees that the defect is covered by the relevant Vehicle Warranty, Spare Parts Warranty or other warranty or the Supplier fails to perform any repairs in accordance with Clause 4.7.1 and the Contracting Authority believes that repairs must proceed (including any necessary replacements as the Contracting Authority may reasonably determine), the Contracting Authority may immediately commence repairs, either directly or through its service provider or other authorized representative. If the Contracting Authority undertakes repairs, it shall correct or repair the defect and any related defects using parts specified by the Supplier that are specifically available for the repair. The Contracting Authority may require that the Supplier make Spare Parts available for purchase by the Contracting Authority. The Contracting Authority will be entitled to be reimbursed for all costs incurred by the Contracting Authority under this Clause where the Contracting Authority has undertaken repairs that the Supplier has failed to perform in accordance with Clause 4.7.1.
- 4.7.6 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 Contracting Authority's or a Vehicle Operator's Vehicle fleet or any part thereof, then the Contracting Authority may within five (5) Working Days after such repair or replacement give notice to the Supplier requiring that further inspection tests are performed by the Supplier to determine if such defect exists in the other Vehicles in the Contracting Authority's and/or Vehicle Operator's fleet. The Supplier 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 Contracting Authority's or a Vehicle Operator's fleet, then the provisions of this Clause 4 shall begin to apply to such Vehicle as of the date of discovery of the same defect in such Vehicle.
- 4.8 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.
- 4.9 If any significant materials or equipment supplied hereunder are covered by warranties of the manufacturer or supplier other than the Supplier ("**Third Party Warranties**") and such Third Party Warranties have terms that are longer or more favourable than the warranties provided by the Supplier in this Call-Off Purchase Agreement for such significant materials or equipment, then the Supplier will extend, at no additional cost to the Contracting

Authority and any applicable Vehicle Operator, the duration and/or scope of the applicable Third Party Warranties and notify the Contracting Authority thereof by written notice.

- 4.10 Any disputes regarding the warranty provisions of this Clause 4 (including whether specific repairs are covered and the reimbursable cost of repairs) shall be subject to the dispute resolution procedures set out in Clause 31 of this Call-Off Purchase Agreement.
- 4.11 Each warranty in this Clause 4 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.
- 4.12 The Supplier agrees that the warranties provided under and the provisions of this Clause 4 shall apply equally to the Vehicle Operators at no additional cost.

5. VEHICLES AND SERVICES

5.1 Supply of Vehicles and Spare Parts

Without prejudice to Clause 4, the Supplier warrants that all Vehicles and Spare Parts sold by the Supplier pursuant to this Call-Off Purchase Agreement shall:

- 5.1.1 be 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 Call-Off Purchase Agreement;
 - 5.1.2 be of satisfactory quality and fit for purpose, including any purpose held out by the Supplier or made known to the Supplier by the Contracting Authority;
 - 5.1.3 be fully operational and free from defects in design, materials and workmanship;
 - 5.1.4 have a rate of deterioration no more than is reasonably to be expected of well designed and engineered materials and goods to enable the Vehicles to meet the operational availability requirements and service and maintenance schedule in accordance with the Statement of Requirements; and
 - 5.1.5 be so formulated, designed, constructed and finished in accordance with the Specification as to be safe and minimise risk to health when operated correctly and in accordance with the Supplier's notified instructions.
- 5.2 The Supplier agrees to use its best endeavours to obtain for the Contracting Authority the benefit of any guarantee or warranty that is given by the

manufacturer of the Vehicles and/or Spare Parts. Such warranty shall be in addition to the rights and warranties that the Contracting Authority is provided with under this Call-Off Purchase Agreement.

- 5.3 The Supplier warrants that it has full legal and beneficial title to the Vehicles and Spare Parts and that it will transfer title in the Vehicles to the Contracting Authority pursuant to Clause 15.

Supply of Services

- 5.4 In addition to the Supplier's obligations to provide support for the Vehicles in connection with the warranties set out in Clause 4, the Supplier shall provide the Services in accordance with the Statement of Requirements and Schedule 2.

- 5.5 The Supplier warrants that it shall supply the Services under this Call-Off Purchase Agreement:

5.5.1 with the highest skill, care and diligence normally exercised by highly skilled and experienced suppliers providing services of a similar scope, type and complexity to the Services and with sufficient resources including project management resources;

5.5.2 in conformance in all respects with the Statement of Requirements;

5.5.3 in a good, workmanlike and timely manner; and

5.5.4 in a safe manner and free from any unreasonable or avoidable risk to any person's health, well-being and property and in an economic and efficient manner and free from any unreasonable or avoidable risk of pollution, nuisance, interference or hazard.

6. SCOPE OF THIS CALL-OFF PURCHASE AGREEMENT

Nothing in this Call-Off Purchase Agreement shall be construed as creating a partnership, a contract of employment or a relationship of principal and agent between the Contracting Authority and the Supplier.

7. INSPECTION, DELIVERY, ACCEPTANCE AND REJECTION OF VEHICLES

Pre-delivery Inspection

- 7.1 Prior to delivering a Vehicle to the Delivery Location the Contracting Authority shall be entitled to carry out the inspection tests set out in Schedule 5 of this Call-Off Purchase Agreement for each Vehicle (the "Pre-Delivery Inspection"). The Contracting Authority shall maintain written documentation reasonably demonstrating that the Pre-Delivery Inspection has been carried out and (if applicable) successfully passed by each Vehicle.

- 7.2 The Supplier shall give the Contracting Authority Technical Manager access to the Supplier's Site and permit the Contracting Authority Technical Manager

to carry out the Pre-Delivery Inspections. If the Vehicles are being manufactured on other premises the Supplier shall obtain for the Contracting Authority Technical Manager permission to carry out the inspections at the premises where the Vehicles are being manufactured.

- 7.3 All Pre-Delivery Inspections shall be undertaken at the Supplier's expense, but the Contracting Authority shall pay expenses of the Contracting Authority Technical Manager attending the test.
- 7.4 The Supplier shall give the Contracting Authority a minimum of 10 Working Days written notice of the dates on which a Vehicle is to be submitted for its Pre-Delivery Inspection provided, however, that the Contracting Authority may at its sole discretion postpone the dates of any Pre-Delivery Inspection subject to the Supplier being entitled to an extension to the delivery date for the relevant Vehicles (by a period equivalent to the period or postponement). The Parties acknowledge that the Pre-Delivery Inspections are expected to take place at the Supplier's Site located in Galgorm Industrial Estate, Fenaghy Road, Ballymena, Co. Antrim, BT42 1PY.
- 7.5 Upon a Vehicle passing its Pre-Delivery Inspection, the Contracting Authority shall issue a Pre-Delivery Inspection Report to that effect to the Supplier within five (5) Working Days of such Vehicle passing its Pre-Delivery Inspection.
- 7.6 If after undertaking the Pre-Delivery Inspection in respect of the first Vehicle manufactured by the Supplier in accordance with this Call-Off Purchase Agreement, the Contracting Authority Technical Manager reasonably determines that the Vehicle or any part does not pass the Pre-Delivery Inspection, the Contracting Authority may reject the Vehicle or any part by issuing a Pre-Delivery Inspection Report stating the grounds upon which the decision is based. Following receipt of such rejection, the Supplier shall make good or otherwise repair or replace the defective parts.
- 7.7 No Vehicle may be delivered to the Delivery Location unless the first Vehicle manufactured in accordance with this Call-Off Purchase Agreement has been issued a Pre-Delivery Inspection Report indicating that such Vehicle has successfully passed its Pre-Delivery Inspection.

Delivery of Vehicles

- 7.8 The Supplier shall deliver the Vehicles to the Delivery Location specified in Schedule 4 of this Call-Off Purchase Agreement on the dates specified in Schedule 5 of this Call-Off Purchase Agreement unless agreed otherwise by the Parties in writing.
- 7.9 The Supplier shall:
 - 7.9.1 deliver all Vehicles in accordance with the Delivery Plan set out in Schedule 5 of this Call-Off Purchase Agreement;

- 7.9.2 provide the Contracting Authority with no less than forty eight (48) hours and no more than one (1) week's notice confirming the delivery time of each Vehicle to be delivered;
- 7.9.3 off-load all Vehicles delivered to the Contracting Party pursuant to this Clause 7 at its own risk and as reasonably directed by the Contracting Authority.

Inspection of Vehicles

- 7.10 The Contracting Authority will arrange for the inspection of each Vehicle within three (3) Working Days of its delivery.

Non-Conformance

- 7.11 If the Contracting Authority observes any non-conformity of a Vehicle with this Call-Off Purchase Agreement (including but not limited to the Statement of Requirements), the Contracting Authority shall promptly notify the Supplier of such non-conformance.

Acceptance Certificate

- 7.12 Unless Clause 7.11 applies, the Contracting Authority will confirm Acceptance of the delivered Vehicles by executing and delivering a duly completed Acceptance Certificate within five (5) Working Days of the date that a Vehicle is delivered.

Effect of Acceptance Certificate

- 7.13 The delivery by the Contracting Authority to the Supplier of the Acceptance Certificate will constitute conclusive evidence of delivery to and Acceptance by the Contracting Authority of such Vehicle under this Call-Off Purchase Agreement.

Correction of non-conforming Vehicles

- 7.14 Where Clause 7.11 applies, without prejudice to any other rights and remedies of the Contracting Authority, the Contracting Authority may require the Supplier (at its own expense) to correct or procure the correction of the non-conforming Vehicles within such timeframe as may be notified by the Contracting Authority. The Supplier will confirm whether it is able to correct or procure the correction of the non-conforming Vehicles:

- 7.14.1 within the Contracting Authority's reasonably proposed timeframe; and

- 7.14.2 at the Contracting Authority's premises.

- 7.15 Where the Supplier confirms that it is unable to correct or procure the correction of the non-conforming Vehicles in accordance with Clause 7.14, without prejudice to any other rights or remedies of the Contracting Authority,

the Contracting Authority may opt to reject the non-conforming Vehicles and shall notify that rejection to the Supplier.

8. Spare Parts

- 8.1 Throughout the operational life of the Vehicles (being 14 years from the date the Vehicles pass inspection), the Supplier agrees with the Contracting Authority to ensure that in accordance with the provisions of this Call-Off Purchase Agreement it is able to supply all Spare Parts required by the Contracting Authority and Vehicle Operators to operate and maintain the Vehicles in accordance with the requirements contained in Schedule 7. The Parties acknowledge and agree that the Contracting Authority may choose not to purchase Spare Parts from the Supplier and that use of Spare Parts from third party suppliers may invalidate the relevant elements of the Vehicle Warranty provided by the Supplier.
- 8.2 From time to time the Contracting Authority may place a written purchase order with the Supplier for Spare Parts provided that the Contracting Authority shall at all times be at liberty to obtain any Spare Parts that it may require from any source. The Supplier will confirm any orders for Spare Parts in accordance with the provisions of Schedule 7 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 Schedule 7. The Supplier 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.
- 8.3 Delivery of the Spare Parts shall be deemed to be made at the time of receipt by the Contracting Authority at the location set out in Schedule 7 and completion of an acknowledgement of receipt by the Contracting Authority.
- 8.4 The prices to be paid for Spare Parts shall be agreed between the Parties but shall be no higher than the price listed in any general price list published by the Supplier from time to time, as set out in Schedule 7. The payment terms for all Spare Parts supplied to the Contracting Authority by the Supplier will be as set out in Clause 10 and Schedule 3. The Supplier agrees with the Contracting Authority that it will supply Spare Parts to Vehicle Operators on terms, including as to price and payment, no less favourable than the terms set out in this Clause 8.
- 8.5 If the Supplier fails to provide Spare Parts ordered from the Supplier and these are available from any of its sub-contractors, the Supplier agrees that the Contracting Authority and the Vehicle Operators may obtain such Spare Parts from such sub-contractors and the Supplier shall pay the Contracting Authority and/or the Vehicle Operators any additional costs, charges or expenses incurred.
- 8.6 If the Supplier fails to deliver any Spare Parts within twenty (20) Working Days of receipt of a purchase order by the Contracting Authority or a Vehicle Operator, the Contracting Authority 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 Contracting Authority and/or the Vehicle Operator in securing such replacement bus(es) from the Supplier.

9. CHARGES

9.1 In consideration of the supply of Vehicles, Spare Parts and Services specified in Schedules 1 and 2 of this Call-Off Purchase Agreement, the Contracting Authority shall pay to the Supplier the Charges.

9.2 The Supplier shall invoice the Contracting Authority in accordance with the procedure set out in Clause 10 and in consideration of, and subject to the supply of the Vehicles and/or Spare Parts and proper performance of the Services by the Supplier in accordance with the terms of this Call-Off Purchase Agreement the Contracting Authority shall pay the Supplier the Charges in accordance with those procedures.

9.3 The Charges are inclusive of VAT unless stated otherwise in Schedule 3.

10. PAYMENT TERMS

10.1 The Supplier shall invoice the Contracting Authority in respect of the Charges:

10.1.1 where no Payment Milestones are specified in Schedule 3, at such dates or at the end of such periods as may be specified in Schedule 3;

10.1.2 on completion of each Payment Milestone. It is a condition precedent of the submission of an invoice on completion of a Payment Milestone that all preceding Payment Milestones specified in this Call-Off Purchase Agreement have been completed; and

10.1.3 if specified in a Call-Off Purchase Agreement within thirty (30) days from the date any Services and/or Spare Parts were provided.

10.2 The invoices submitted upon achievement of any Payment Milestone shall request payment of the applicable portion of the Charges that is payable pursuant to Schedule 3 for such Payment Milestone.

10.3 The Contracting Authority shall pay any undisputed Charges due to the Supplier in cleared funds within thirty (30) days of receipt and agreement of invoices provided that the Vehicles, Services and Spare Parts to which the invoice relates have been supplied fully in accordance with this Call-Off Purchase Agreement.

10.4 Each invoice submitted by the Supplier shall be clear, concise, accurate, adequately descriptive and contain all appropriate references and a detailed breakdown of the Vehicles, Services and Spare Parts to which the invoice relates, including reference to an applicable Payment Milestone and a

breakdown of any VAT payable and shall be supported by any other documentation required by the Contracting Authority to substantiate the invoice.

- 10.5 The Supplier shall promptly provide to the Contracting Authority the relevant banking details to which payment of the Charges should be made.
- 10.6 All invoices shall be submitted, along with all relevant supporting documentation, to the Contracting Authority at the address set out in Schedule 3.
- 10.7 Unless otherwise expressly provided, the Charges are inclusive of all costs and expenses (including any and all import taxes and similar taxes) and all ancillary and other works and expenditure which are necessary to supply the Vehicles, Services and Spare Parts or which may contingently become necessary to overcome difficulties in providing the same.
- 10.8 Where the Supplier subcontracts any part of this Call-Off Purchase Agreement to a third party, the Supplier is responsible for the payments to that third party.
- 10.9 No payment made by the Contracting Authority (including any final payment) shall:
 - 10.9.1 indicate or be taken to indicate the Contracting Authority's acceptance or approval of the Vehicles Spares and/or Services or any part of them or any act or omission of the Supplier, or otherwise prejudice any rights, powers or remedies which the Contracting Authority may have against the Supplier, or absolve the Supplier from any obligation or liability imposed on the Supplier under this Call-Off Purchase Agreement; or
 - 10.9.2 prevent the Contracting Authority from recovering any amount overpaid or wrongfully paid, including payments made to the Supplier by mistake of law or fact. The Contracting Authority shall be entitled to withhold such amount from any sums due or which may become due to the Supplier or the Contracting Authority may recover such amount as a debt under this Call-Off Purchase Agreement.
- 10.10 If any sum payable by the Contracting Authority under this Call-Off Purchase Agreement is not paid when properly due (excluding any disputed amounts) then the Supplier shall be entitled to recover interest on that sum from the due date until payment is made in full, both before and after any judgment, at a rate of 2% above the base rate of HSBC Bank plc from time to time. The Parties agree that this Clause 10.10 is a substantial remedy for the late payment of any sum payable under this Call-Off Purchase Agreement in accordance with section 8(2) Late Payment of Commercial Debts (Interest) Act 1998.

11. LIQUIDATED DAMAGES FOR LATE DELIVERY

- 11.1 The Supplier agrees to pay to the Contracting Authority the liquidated damages set out in Clause 11.2 for each Vehicle that the Supplier fails to deliver on or before the agreed delivery date for that Vehicle whether delivery is to the Contracting Authority or any third party, provided however, that the Contracting Authority shall not be entitled to recover liquidated damages to the extent the Supplier 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 Contracting Authority after the agreed delivery date, the Supplier agrees to pay the Contracting Authority liquidated damages as follows:
- 11.2.1 In the case of a delay which prevents the Vehicle entering into route operations on the date agreed in the delivery schedule, liquidated damages of £275 per day will apply, starting from the day of planned route operation.
 - 11.2.2 The total liquidated damages payable pursuant to Clause 11.2.1 in respect of each Vehicle shall be limited to a maximum of £5,500 (20 days) payable for each Vehicle.
 - 11.2.3 The Supplier further agrees to pay the Contracting Authority liquidated damages in accordance with Clause 11 for any Vehicle which is unavailable for service as a result of it being in breach of the Vehicle Warranty ("Vehicle off the Road").
 - 11.2.4 A Vehicle is considered to be a Vehicle off the Road (VOR) 120 hours (5 days) after the Vehicle fault has been reported on the CustomCare system. If the Vehicle is VOR for more than five (5) consecutive working days (which, for avoidance of doubt, shall include Saturdays, Sundays and Bank Holidays), then the Supplier will pay liquidated damages of £150 per day of VOR up to a maximum of £3,000 (20 days) per calendar year, for any Vehicle which falls within the base two (2) year warranty period.
- 11.3 All sums payable by the Supplier to the Contracting Authority 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 Contracting Authority 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 Supplier 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 Contracting Authority from exercising any of its rights under this Contract.

12. Operating Information and Training Programme

- 12.1 The Supplier shall promptly render to the Contracting Authority and Vehicle Operators all reasonable Operating Information that they may require in

connection with the operation or day-to-day maintenance of the Vehicles and/or Spare Parts, as more specifically described in, and in accordance with the terms of, the Statement of Requirements, together with one set of all such Operating Information on disk and any and all updates to such Operating Information.

12.2 The Supplier warrants that all Operating Information provided by the Supplier to the Contracting Authority is complete and accurate and suitable and sufficient to enable the Contracting Authority to enjoy the full benefit of the Vehicles, Spare Parts and Services.

12.3 The Supplier shall provide an educational and training programme (the "Training Programme") for personnel of the Contracting Authority (and/or for its Vehicle Operators) that demonstrates the proper servicing and maintenance of the Vehicles, as more specifically described in, and in accordance with the terms of, the Statement of Requirements.

13. **NOT USED**

14. **RECOVERY OF SUMS DUE**

14.1 Wherever under this Call-Off Purchase Agreement any sum of money is recoverable from or payable by the Supplier (including any sum which the Supplier is liable to pay to the Contracting Authority in respect of any breach of this Call-Off Purchase Agreement), the Contracting Authority (save where the Contracting Authority is a Vehicle Operator) may unilaterally deduct that sum from any sum then due, or which at any later time may become due to the Supplier under this Call-Off Purchase Agreement or under any other agreement or contract with the Supplier.

14.2 Where under this Call-Off Purchase Agreement any undisputed sum of money is recoverable from or payable by the Contracting Authority (including any sum which the Contracting Authority is liable to pay to the Supplier in respect of any undisputed breach of this Call-Off Purchase Agreement) (save where the Contracting Authority is a Vehicle Operator), the Supplier may suspend performance under this Call-Off Purchase Agreement until such sum is paid.

14.3 Any overpayment by the Contracting Authority to the Supplier, whether of the Charges or of tax, shall be a sum of money recoverable by the Contracting Authority from the Supplier.

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

15. **RISK AND TITLE**

Risk

- 15.1 The risk for any loss, theft, damage or destruction to the Vehicles will pass to the Contracting Authority upon delivery of the Vehicles by the Supplier in accordance with the terms of this Call Off Purchase Agreement.
- 15.2 The risk for any loss, theft, damage or destruction to the Spare Parts will pass to the Contracting Authority upon delivery of the Spare Parts by the Supplier in accordance with the terms of this Call Off Purchase Agreement.

Title

- 15.3 Title in:
 - 15.3.1 a Vehicle will pass to the Contracting Authority upon payment by the Contracting Authority in accordance with Clause 7; and
 - 15.3.2 Spare Parts will pass to the Contracting Authority at the time that the Spare Parts are paid for by the Contracting Authority in accordance with Clause 8.3 or, if applicable, at the time that the Spare Parts are incorporated into the Vehicles, whichever is the earlier.

16. CONTRACTUAL MANAGEMENT

- 16.1 The Contracting Authority authorises (i) the Contracting Authority Manager to act as the Contracting Authority's representative in respect of the day to day management of this Call-Off Purchase Agreement; and (ii) the Contracting Authority Technical Manager to act as the Contracting Authority's representative in respect of all technical matters relating to this Call-Off Purchase Agreement.
- 16.2 The Contracting Authority Manager and the Contracting Authority Technical 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.
- 16.3 Except to the extent provided in any written agreement signed by the Contracting Authority, no act, omission comment or approval of either the Contracting Authority, the Contracting Authority Manager or the Contracting Authority Technical Manager under or in connection with this Call-Off Purchase Agreement shall in any way operate to relieve the Supplier of its responsibility for performing this Call-Off Purchase Agreement.
- 16.4 The Supplier authorises the Supplier's Representative to act as its representative for all purposes of this Call-Off Purchase Agreement. The Supplier's Representative cannot be changed without the prior written approval of the Contracting Authority, such approval not to be unreasonably withheld.

- 16.5 The Supplier's Representative shall meet with the Contracting Authority Manager monthly (or at such other frequency that the Contracting Authority may notify to the Supplier) to consider the implementation of this Call-Off Purchase Agreement including consideration of any information to be provided in accordance with Clause 16.6.
- 16.6 The Supplier shall:
- 16.6.1 provide the Contracting Authority with such reports and information it may reasonably request (including but not limited to reports that the Contracting Authority may use publicly);
 - 16.6.2 provide the Contracting Authority with reports on the timescales of delivery of any key materials or components; and
 - 16.6.3 attend progress meetings with the Contracting Authority in line with the agreed Project Management Plan.

17. STATUTORY OBLIGATIONS AND REGULATIONS

- 17.1 The Supplier shall notify the Contracting Authority of all statutory provisions and approved safety standards applicable to the Vehicles, Spare Parts and performance of any Services.
- 17.2 The Supplier shall be responsible for obtaining all licences, consents, permits to fulfil all statutory provisions and approved safety standards required for the performance of the Supplier's obligations under this Call-Off Purchase Agreement.
- 17.3 The Supplier shall be responsible for obtaining for each Vehicle prior to Delivery all certification, registration, and any other documentation required in order for the Contracting Authority to have full use of the Vehicle in accordance with the Statement of Requirements.
- 17.4 The Supplier shall take all measures necessary to comply with the requirements of the Health and Safety at Work Act 1974 and any other Laws, orders, regulations and codes of practice relating to health and safety, which may apply in the performance of the Supplier's obligations under this Call-Off Purchase Agreement.
- 17.5 The Supplier shall promptly notify the Contracting Authority of any health and safety hazards which may arise in connection with the performance of this Call-Off Purchase Agreement. The Contracting Authority shall promptly notify the Supplier of any health and safety hazards which may exist or arise at the Contracting Authority's premises and which may affect the Supplier in the performance of this Call-Off Purchase Agreement.
- 17.6 While on the Contracting Authority's premises, the Supplier shall comply (and shall ensure compliance by the Supplier's personnel, agents and sub-contractors on those premises) with any health and safety measures or other policies implemented by the Contracting Authority.

- 17.7 The Supplier shall notify the Contracting Authority immediately in the event of any incident occurring in the performance of this Call-Off Purchase Agreement on the Contracting Authority's premises where that incident causes any personal injury or damage to property which could give rise to personal injury or damage to property which could give rise to personal injury.
- 17.8 The Supplier shall ensure that its health and safety policy statement (as required by the Health and Safety at Work Act 1974) is made available to the Contracting Authority on request.

18. INTELLECTUAL PROPERTY RIGHTS

- 18.1 Save as granted under this Call-Off Purchase Agreement, neither the Contracting Authority nor the Supplier shall acquire any right, title or interest in the other's Pre-Existing Intellectual Property Rights.
- 18.2 The Supplier shall procure that the performance of the Supplier's responsibilities under this Call-Off Purchase Agreement shall not infringe any Intellectual Property Rights of any third party.
- 18.3 The Supplier shall indemnify the Contracting Authority against all claims, demands, actions, costs, expenses (including legal costs and disbursements on a solicitor and client basis), losses and damages arising from or incurred by reason of any infringement or alleged infringement (including the defence of such alleged infringement) of any Intellectual Property Right by the performance of the Supplier's responsibilities under this Call-Off Purchase Agreement, except to the extent that such liabilities have resulted directly from the Contracting Authority's failure to observe its obligations under this Call-Off Purchase Agreement.
- 18.4 The Supplier shall promptly notify the Contracting Authority if any claim or demand is made or action brought against the Supplier for infringement or alleged infringement of any Intellectual Property Right that may affect the availability of the Vehicles or Services.
- 18.5 The Contracting Authority shall promptly notify the Supplier if any claim or demand is made or action brought against the Contracting Authority to which Clause 18.3 or Clause 18.4 may apply. The Supplier shall at its own expense conduct any litigation arising therefrom and all negotiations in connection therewith and the Contracting Authority hereby agrees to grant to the Supplier exclusive control of any such litigation and such negotiations.
- 18.6 The Contracting Authority shall at the request of the Supplier afford to the Supplier all reasonable assistance for the purpose of contesting any claim or demand made or action brought against the Contracting Authority to which Clause 18.3 may apply or any claim or demand made or action brought against the Supplier to which Clause 18.4 may apply. The Supplier shall reimburse the Contracting Authority for all costs and expenses (including,

reasonable legal costs and disbursements on a solicitor and client basis) incurred in so doing.

- 18.7 If a claim or demand is made or action brought to which Clause 18.3 may apply, or in the reasonable opinion of the Supplier is likely to be made or brought, the Supplier may at its own expense and within a reasonable time either:
- 18.7.1 modify any or all of Vehicles or Services without reducing the performance and functionality of the same, or substitute alternative Vehicles or Services of equivalent performance and functionality for any or all of the Vehicles or Services, so as to avoid the infringement or the alleged infringement, provided that the terms herein shall apply mutatis mutandis to such modified or substituted items or services and such substitution shall not increase the burden on the Supplier or the Contracting Authority; or
 - 18.7.2 procure a licence to use the Vehicles (or to perform the Services) on terms that are reasonably acceptable to the Contracting Authority.
- 18.8 In the event that the Supplier has availed itself of its rights to modify the Vehicles and/or Services or to supply a substitute alternative vehicle or vehicles and/or associated service or services pursuant to Clause 18.7.1 or to procure a licence under Clause 18.7.2 and such exercise of the said rights has avoided any claim, demand or action for infringement or alleged infringement, then the Supplier shall have no further liability thereafter under Clause 18 in respect of the said claim, demand or action, save as set out in Clause 18.3.
- 18.9 This Clause 18 sets out the entire financial liability of the Supplier with regard to the infringement of any Intellectual Property Right by the availability of the Vehicles, Services and Spare Parts. This shall not affect the Supplier's financial liability for other defaults or causes of action that may arise hereunder.
- 18.10 The Contracting Authority shall indemnify the Supplier against all claims, demands, actions, costs, expenses (including legal costs and disbursements on a solicitor and client basis), Losses and damages arising from or incurred by reason of any infringement or alleged infringement (including the defence of such alleged infringement) of any third party item (including any documents, materials or equipment) supplied directly by the Contracting Authority in accordance with any instructions given by the Contracting Authority in connection with the use of such item shall not cause the Supplier to infringe any third party's Intellectual Property Rights in such item.
- 18.11 The provisions of Clause 18.3 shall apply during the continuance of this Call-Off Purchase Agreement and indefinitely after its expiry or termination.

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

- 19.1 Save that any member of the Contracting Authority's Group and any Vehicle Operator has the right to enforce the terms of this Call-Off Purchase Agreement in accordance with the Contracts (Rights of Third Parties) Act 1999 ("Third Party Act"), the Parties do not intend that any of the terms of this Call-Off Purchase Agreement will be enforceable by virtue of the Third Party Act by any person not a party to it.
- 19.2 Notwithstanding Clause 19.1, the Parties are entitled to vary or rescind this Call-Off Purchase Agreement without the consent of any other person including any member of the Contracting Authority's Group.

20. **WAIVER**

No waiver of any of the provisions of this Call-Off Purchase Agreement is effective unless it is expressly stated to be a waiver and communicated to the other Party in writing in accordance with the provisions of Clause 30. The single or partial exercise of any right, power or remedy under this Call-Off Purchase Agreement shall not in any circumstances preclude any other or further exercise of it or the exercise of any other such right, power or remedy.

21. **VARIATION**

This Call-Off Purchase Agreement may only be varied or amended with the written agreement of both Parties. The details of any variations or amendments shall be set out in such form as the Contracting Authority may dictate and shall not be binding upon the Parties unless completed in accordance with such form of variation.

22. **SEVERABILITY**

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

23. **TERMINATION**

- 23.1 In addition to the termination rights set out elsewhere in this Call-Off Purchase Agreement, the Parties may also exercise their rights to terminate in accordance with the terms of this Clause 23.

Termination on Default

- 23.2 The Contracting Authority may terminate the whole or any part of this Call-Off Purchase Agreement with immediate effect by giving notice in writing to the Supplier if:
- 23.2.1 the Supplier commits a material breach of its obligations under this Call-Off Purchase Agreement and (if such breach is remediable) fails to remedy that breach within a period of thirty (30) days after receipt of notice in writing requiring it to do so; or
 - 23.2.2 the Supplier commits a series of persistent minor breaches which, when taken together, amount to a material breach and fails to remedy the breaches within a period of thirty (30) days after receipt of notice in writing requiring it to do so; or
 - 23.2.3 the material breach under Clauses 23.2.1 or 23.2.2 is not, in the reasonable opinion of the Contracting Authority, capable of remedy or;
 - 23.2.4 the Contracting Authority is not satisfied on the issue of any conflict of interest in accordance with the terms of the Framework Agreement.
- 23.3 Without prejudice to any of the Contracting Authority's other rights, powers or remedies, if the Supplier is in breach of any of its warranties and/or obligations under this Call-Off Purchase Agreement, the Supplier shall, if required to do so by the Contracting Authority, promptly remedy and/or re-perform the Services and/or re-supply the Vehicles and/or Spare Parts or part of them at its own expense to ensure compliance with such warranties and/or obligations. If the Supplier fails to promptly remedy and/or re-perform and/or re-supply as required by this Clause 23.3, the Contracting Authority may procure the provision of any Services and/or Vehicles and/or Spare Parts or any remedial action in respect of any Services and/or Vehicles and/or Spare Parts from an alternative supplier and, where the Contracting Authority so procures any Services and/or Vehicles and/or Spare Parts or any remedial action, the Contracting Authority shall be entitled to recover from the Supplier all additional cost, loss and expense incurred by the Contracting Authority and attributable to the Contracting Authority procuring such Services and/or Vehicles and/or Spare Parts or remedial action from such alternative supplier.

Termination on Insolvency

- 23.4 The Contracting Authority may terminate this Call-Off Purchase Agreement by serving notice on the Supplier with effect from the date specified in such notice where the Supplier is subject to an Insolvency Event.
- 23.5 Without prejudice to the Contracting Authority's right to terminate this Call-Off Purchase Agreement under Clauses 23.1 to 23.4 or at common law, the Contracting Authority may terminate this Call-Off Purchase Agreement at any time following a Declaration of Ineffectiveness in accordance with the provisions of Clause 34.

23.6 Without prejudice to the Supplier's right to terminate at common law, the Supplier may terminate this Call-Off Agreement immediately upon giving notice to the Contracting Authority if:

23.6.1 the Contracting Authority has committed any material or persistent breach of this Call-Off Agreement and in the case of such a breach that is capable of remedy fails to remedy that breach within 10 Working Days from the date of written notice to the Contracting Authority giving details of the breach and requiring it to be remedied; or

23.6.2 the Contracting Authority becomes insolvent.

24. **CONSEQUENCES OF TERMINATION**

24.1 Termination or expiry of this Call-Off Purchase Agreement shall be without prejudice to any rights and remedies of the Supplier and the Contracting Authority accrued before such termination or expiration and nothing in this Call-Off Purchase Agreement shall prejudice the right of either Party to recover any amount outstanding at such termination or expiry.

24.2 At the end of the Term (and at any point prior to the end of time Term if reasonably required), to the extent not previously provided in the Statement of Requirements, the Parties shall forthwith deliver to the other Party upon request all documents reasonably required by such requesting Party that relate to the Vehicles, Services and Spare Parts supplied under this Call-Off Purchase Agreement.

24.3 At the end of the Term (howsoever arising) the Supplier shall forthwith deliver to the Contracting Authority upon request all the property belonging to the Contracting Authority (including but not limited to materials, documents and information) relating to this Call-Off Purchase Agreement in its possession or under its control or in the possession or under the control of any permitted suppliers or sub-contractors and in default of compliance with this Clause 24.3 the Contracting Authority may recover possession thereof and the Supplier grants reasonable licence to the Contracting Authority or its appointed agents to enter (for the purposes of such recovery) upon reasonable notice any premises of the Supplier or its permitted suppliers or sub-contractors where any such items may be held.

24.4 At the end of the Term (howsoever arising), the Contracting Authority may by notice, in writing, require the Supplier to buy back any or all of Spare Parts supplied under this Call-Off Purchase Agreement that have not been used at the price paid in accordance with Clause 8.4 less a 10% restocking charge. In the event that the Contracting Party exercises its right to require buy back under this Clause 24.4, title to the Spare Part in question shall pass to the Supplier upon payment in full by the Supplier to the Contracting Authority of the Spare Part price and risk in the Spare Part in question shall pass to the Supplier upon delivery of the Spare Part to the Supplier.

- 24.5 Where the Contracting Authority has served a notice to terminate the whole or part of this Call-Off Purchase Agreement, the Contracting Authority shall, at any time before the expiry of the notice to terminate, be entitled to exercise, as soon as may be practicable, such of the following powers as it considers expedient:
- 24.5.1 direct the Supplier, where Services have not been provided and/or Vehicles and/or Spare Parts have not been supplied, to refrain from providing such Services and/or supplying such Vehicles and/or Spare Parts; and/or
 - 24.5.2 direct the Supplier to complete in accordance with this Call-Off Purchase Agreement the supply of all or any of the Services and/or Vehicles (or any part or component of the Services) and/or Spare Parts which are ongoing or which have not been supplied at the expiry of the notice to terminate and to deliver the same at such time or times as may be reasonably decided by the Contracting Authority; and/or
 - 24.5.3 direct that the Supplier shall, as soon as may be practicable after the receipt of such notice:
 - 24.5.3.1 take such steps as will ensure that the Services (or relevant part of the Services, in the event of a partial termination of this Call-Off Purchase Agreement) being provided by the Supplier are reduced as rapidly as possible; and/or
 - 24.5.3.2 as far as possible concentrate work on the completion of Services (or relevant part of the Services, in the event of a partial termination of this Call-Off Purchase Agreement) partly provided.
- 24.6 Without limitation to the foregoing, any other Clause which by its terms is to be performed or observed notwithstanding termination or expiry or which is expressed to survive termination or expiry) shall survive the termination or expiry of this Call-Off Purchase Agreement, together with any other provision which is either expressed to or by implication is intended to survive termination
- 24.7 Upon the termination or expiry of this Call-Off Purchase Agreement (or following service of any notice to terminate by the Contracting Authority) and subject to Clause 16 of the Framework Agreement, the Supplier shall promptly provide all such information and assistance requested by the Contracting Authority concerning the Vehicles, Spare Parts and/or the provision of the Services in order to provide such information to third parties whom the Contracting Authority has invited to tender for the provision of vehicles, spare parts and/or associated services.
- 24.8 The provisions of this Clause shall survive the continuance of this Call-Off Purchase Agreement and indefinitely after its termination.

25. FORCE MAJEURE

- 25.1 Neither Party shall be deemed to be in breach of this Call-Off Purchase Agreement, or otherwise liable to the other Party in any manner whatsoever, for any failure or delay in performing its obligations under this Call-Off Purchase Agreement to the extent that such failure or delay is due to a Force Majeure Event.
- 25.2 If a Force Majeure Event has continued for more than eight (8) weeks from the date on which that Force Majeure Event first arose and is having a material adverse effect on either Party's performance of its obligations under this Call-Off Purchase Agreement ("the Affected Party"), then for as long as such Force Majeure Event continues and has that effect, the Party not affected by such Force Majeure Event ("Innocent Party") may terminate this Call-Off Purchase Agreement immediately upon giving notice to the Affected Party.
- 25.3 If this Call-Off Purchase Agreement is terminated in accordance with this Clause 25 then without prejudice to any rights and liabilities which accrued prior to termination the Affected Party shall not be liable to the Innocent Party by reason of such termination.

26. REMEDIES CUMULATIVE

Except as otherwise expressly provided by this Call-Off Purchase Agreement, all remedies available to either Party for breach of this Call-Off Purchase Agreement are cumulative and may be exercised concurrently or separately, and the exercise of any one remedy shall not be deemed an election of such remedy to the exclusion of other remedies.

27. ASSIGNMENT, SUB-CONTRACTING AND CHANGE OF OWNERSHIP

- 27.1 This Call-Off Purchase Agreement is personal to the Supplier and the Supplier shall not assign, novate, or otherwise dispose of or sub-contract this Call-Off Purchase Agreement or any part thereof without the previous consent in writing of the Contracting Authority, such consent not to be unreasonably withheld.
- 27.2 In the event that the Supplier wishes to sub-contract any of its obligations under this Call-Off Purchase Agreement, the Supplier shall apply in writing for the prior written consent of the Contracting Authority identifying the relevant sub-contractor and providing the Contracting Authority with all such information reasonably requested.
- 27.3 If the Contracting Authority grants consent pursuant to Clause 27.1 for the Supplier to sub-contract any of its obligations under this Call-Off Purchase Agreement the Supplier shall:
- 27.3.1 ensure that such person is obliged to comply with all of the obligations and duties of the Supplier under this Call-Off Purchase Agreement insofar as they relate to Vehicles, Spare Parts and/or

Services or part of them (as the case may be) which that sub-contractor is required to provide;

27.3.2 be responsible for payments to that person; and

27.3.3 remain solely responsible and liable to the Contracting Authority for any breach of this Call-Off Purchase Agreement or any delay or failure of the Vehicles, Spare Parts or any performance, non-performance, part-performance or delay in performance of any of the Services 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 Supplier.

27.4 In the event of breach of Clause 27.1 by the Supplier, the Contracting Authority shall be entitled to terminate this Call-Off Purchase Agreement immediately on written notice to the Supplier.

27.5 The Contracting Authority shall be entitled to assign, novate or otherwise dispose of or sub-contract its rights and obligations under this Call-Off Purchase Agreement or any part thereof to any other body (including any private or public sector body).

27.6 The Supplier shall:

27.6.1 give written notice to the Contracting Authority in the event that there is any change in the ownership or control of the Supplier where such change relates to 50% or more of the issued share capital of the Supplier, such notice to be given within five (5) Working Days of the date on which such change takes effect; and

27.6.2 give notice to the Contracting Authority in the event that there is any change in the ownership of the Holding Company of the Supplier where such change relates to 50% or more of the issued share capital of such Holding Company, such notice to be given within ten (10) Working Days of the date on which such change takes effect.

28. **ENTIRE AGREEMENT**

This Call-Off Purchase Agreement and the Framework Agreement constitutes the entire agreement between the Parties relating to the subject matter of this Call-Off Purchase Agreement. This Call-Off Purchase Agreement supersedes all prior negotiations, representations and undertakings, whether written or oral, except that this Clause 28 shall not exclude liability in respect of any fraudulent misrepresentation.

29. **LIABILITIES AND INSURANCE**

Liability and Indemnity

29.1 Neither Party excludes or limits liability to the other Party for death or personal injury caused by its negligence or for any breach of any obligations

implied by Section 2 of the Supply of Goods and Services Act 1982 or for fraud or fraudulent misrepresentation or for any other liability which cannot be excluded or limited as a matter of law.

- 29.2 The Supplier shall indemnify and keep indemnified the Contracting Authority fully against all claims, proceedings, actions, damages, reasonable legal costs, reasonable expenses and any other liabilities whatsoever arising out of, in respect of or in connection with this Call-Off Purchase Agreement including in respect of any death or personal injury, loss of or damage to property, financial loss arising from any advice given or omitted to be given by the Supplier (or its sub-contractors, agents or personnel), or any other loss which is caused directly by any act or omission of the Supplier (or its sub-contractors, agents or personnel where their act or omission was instructed by the Supplier).
- 29.3 Subject to Clauses 29.1 and 29.4, neither Party shall have any liability to the other Party for any indirect, consequential or special losses howsoever arising out of or in connection with this Call-Off Purchase Agreement, whether in contract, tort, misrepresentation, under statute or otherwise, howsoever caused, including by negligence.
- 29.4 Clause 29.3 shall not prevent the Contracting Authority from recovering any direct losses which the Contracting Authority incurs or suffers arising from the termination of this Call-Off Purchase Agreement due to any breach or default by the Supplier, including in respect of the re-tendering and/or procuring or implementing of alternative or replacement supplier for vehicles, spare parts and/or services, including the cost of selecting and negotiating with a supplier to replace the Supplier and any increases to the Charges resulting therefrom, together with any additional cost of management time and other costs incurred by the Contracting Authority.

Insurance

- 29.5 The Supplier shall at its own cost effect and maintain policies of insurance to provide a level of cover sufficient for all risks which may be incurred by the Supplier under this Call-Off Purchase Agreement including death or personal injury, or loss of or damage to property.
- 29.6 The Supplier shall effect and maintain the following insurances per claim, incident or occurrence for the duration of this Call-Off Purchase Agreement in relation to the performance of this Call-Off Purchase Agreement:
- 29.6.1 product liability insurance to the value of ten million pounds (£10,000,000);
 - 29.6.2 motor trader's insurance to the value of £5,000,000 (five million pounds) or public liability insurance to the value of ten million pounds (£10,000,000);
 - 29.6.3 employers' liability insurance to the value of five million pounds (£5,000,000).

- 29.6.4 insurance for the Vehicles and Spare Parts and all parts and accessories associated with the same and any other property of any nature whatsoever provided by the Supplier to the Contracting Authority for the purposes of the Call-Off Purchase Agreement for the full replacement value thereof against all loss or damage from whatsoever cause until the relevant Vehicles and/or Spare Parts are delivered in accordance with the Delivery Plan.
- 29.7 Any excess or deductibles under such insurance (referred to in Clause 29.5 and Clause 29.6) shall be the sole and exclusive responsibility of the Supplier.
- 29.8 The terms of any insurance or the amount of cover shall not relieve the Supplier of any liabilities arising under this Call-Off Purchase Agreement.
- 29.9 The Supplier shall produce to the Contracting Authority, on request, copies of all insurance policies referred to in this Clause 29 or a broker's verification of insurance to demonstrate that the appropriate cover is in place, together with receipts or other evidence of payment of the latest premiums due under those policies.
- 29.10 If, for whatever reason, the Supplier fails to give effect to and maintain the insurances required by this Call-Off Purchase Agreement then the Contracting Authority may make alternative arrangements to protect its interests and may recover the costs of such arrangements from the Supplier.
- 29.11 If any of the insurances in Clause 29.6 contain a care, custody or control exclusion, the relevant policy shall be amended to confirm that any premises (including contents) and property of the Contracting Authority (including Vehicles subject to Services performed by or on behalf of the Supplier) will not be deemed to be in the Supplier's care, custody or control.

30. NOTICES

- 30.1 Any notice, demand or communication in connection with this Call-Off Purchase Agreement will be in writing and may be delivered by hand or post addressed to the recipient at its registered office or any other address notified to the other Party in writing in accordance with this Clause as an address to which notices, invoices and other documents may be sent.
- 30.2 The notice, demand or communication will be deemed to have been duly served:
- 30.2.1 if delivered by hand, at the time of delivery; or
- 30.2.2 if delivered by post, two (2) Working Days after being posted or in the case of Airmail fourteen (14) Working Days after being posted,
- provided that, where in the case of delivery by hand, such delivery occurs either after 4.00 pm on a Working Day, or on a day other than a Working Day, service will be deemed to occur at 9.00 am on the next following Working Day (such times being local time at the address of the recipient).

31. DISPUTES AND LAW

31.1 Governing Law

This Call-Off Purchase Agreement (and any non-contractual obligations arising out of or in connection with it) shall be governed by and construed in accordance with the law of England and Wales.

31.2 Jurisdiction

Without prejudice to Clause 31, the courts of England will have exclusive jurisdiction to settle any dispute which may arise out of or in connection with this Call-Off Purchase Agreement provided that the Contracting Authority has the right in its absolute discretion to enforce a judgment and/or to take proceedings in any other jurisdiction in which the Supplier is incorporated or in which any assets of the Supplier may be situated. The Parties agree irrevocably to submit to that jurisdiction.

32. DISPUTE RESOLUTION

32.1 Subject to Clause 32.9, the Contracting Authority and the Supplier 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 Call-Off Purchase Agreement ("Dispute") before resorting to litigation.

32.2 If the Dispute is not settled through discussion between representatives of the Contracting Authority and the Supplier within a period of seven (7) Working 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.

32.3 If the Dispute is not resolved within fourteen (14) Working 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.

32.4 If the Parties are unable to agree on a mediator, or if the agreed mediator is unable or unwilling to act within twenty eight (28) Working 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.

32.5 Where a dispute is referred to mediation under Clause 32.3, 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.

32.6 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.

- 32.7 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 forty (40) Working Days of the service of the Notice either Party may commence proceedings in accordance with Clause 31.
- 32.8 For the avoidance of doubt, the Supplier shall continue to provide the Vehicles and Services in accordance with this Call-Off Purchase Agreement and without delay or disruption while the Dispute is being resolved pursuant to this Clause 32.
- 32.9 Neither Party shall be prevented from, or delayed in, seeking any order for specific performance or for interim or final injunctive relief as a result of the provisions of this Clause 32 and this Clause 32 shall not apply in respect of any circumstances where such remedies are sought.

33. COUNTERPARTS

This Call-Off Purchase Agreement may be executed in counterparts each of which will constitute one and the same document.

34. DECLARATION OF INEFFECTIVENESS

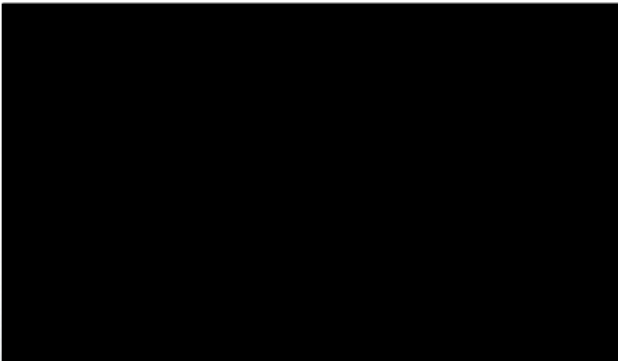
- 34.1 In the event that a court makes a Declaration of Ineffectiveness, the Contracting Authority shall promptly notify the Supplier. The Parties agree that the provisions of Clause 24 and this Clause 34 shall apply as from the date of receipt by the Supplier of the notification of the Declaration of Ineffectiveness. Where there is any conflict or discrepancy between the provisions of Clause 24 and this Clause 34, the provisions of this Clause 34 shall prevail.
- 34.2 The Declaration of Ineffectiveness shall not prejudice or affect any right, liability or remedy which has accrued or shall accrue to either Party prior to or after such Declaration of Ineffectiveness.
- 34.3 As from the date of receipt by the Supplier of the notification of the Declaration of Ineffectiveness, the Parties (acting reasonably and in good faith) shall agree or, in the absence of such agreement, the Contracting Authority shall reasonably determine an appropriate cessation plan to give effect to the terms of the Declaration of Ineffectiveness.
- 34.4 Upon agreement, or determination by the Contracting Authority, of the cessation plan the Parties will comply with their respective obligations under the cessation plan.

EXECUTION PAGE

IN WITNESS of which this document has been executed and, on the date set out above, delivered as a **CONTRACT**.

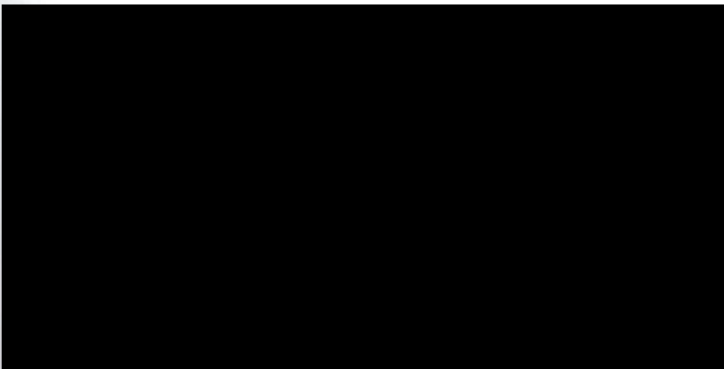
For and on behalf of

LONDON BUS SERVICES LIMITED



for and on behalf of

WRIGHTBUS LIMITED



SCHEDULE 1
STATEMENT OF REQUIREMENTS FOR VEHICLES

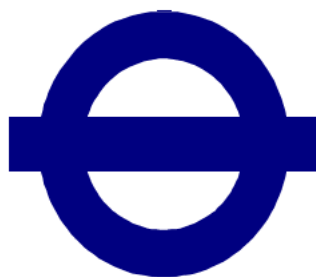
Specification
Vehicle_Design_Conformance_Matrix
Appendices

]

LBSL JIVE Project

Bus Specification – Call Off

Wrightbus Streetdeck H2



FINAL

Transport for London
Palestra Building
197 Blackfriars Road
London SE1 8NJ

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Organisational Overview

Transport for London – Overview

TfL was created in 2000 as the integrated body responsible for London's transport system. TfL is a functional body of the Greater London Authority. Its primary role is to implement the Mayor of London's Transport Strategy and manage transport services to, from and within London.

TfL manages London's buses, the Tube network, Docklands Light Railway, Overground and Trams. TfL also runs Santander Cycles, London River Services, Victoria Coach Station, the Emirates Air Line and London Transport Museum. As well as controlling a 580km network of main roads and the city's 6,000 traffic lights, TfL also regulates London's taxis and private hire vehicles and the Congestion Charge scheme.

Further background on what TfL does can be found on the TfL website here:

<https://tfl.gov.uk/corporate/about-tfl/what-we-do>

Specification Methodology

This complete LBSL JIVE Project bus order is between LBSL and Wrightbus Ltd for procurement of Wrightbus Streetdeck H2 hydrogen fuel cell double deck buses. This specification is a definitive final list of base specification requirements from the contract framework agreement and the LBSL order specific specification requirements. The base specification requirements have been set out to suppliers within the framework agreement; those that are applicable to the LBSL order call off are detailed within this document. Note, discretionary requirements of the base specification may have become mandatory in this specification. Where the base specification requires that documents, evidence or other material be provided prior to vehicle order or delivery, this has been reiterated in this final specification. Lastly, this call off order specification lists requirements that are either solely LBSL specific or that are options within the base specification, for example; number of doors, seat types, CCTV, exterior livery etc.

Information to Note

Each aspect of the specification has been assigned a Mandatory or Discretionary classification within the "Type" column. Please see below for a description of each.

M – Base - Requirements marked 'M' are mandatory requirements from the framework agreement base specification for which compliance is considered to be essential. The vehicle may be rejected on the basis of non-compliance with mandatory requirements.

D - Base - Requirements marked 'D' are discretionary requirements from the framework agreement base specification for which compliance is not considered to be essential. However, these requirements are deemed to be desirable.

M - Call-off - Requirements marked 'M' are mandatory requirements for the call-off specification for which compliance is considered to be essential. The vehicle may be rejected on the basis of non-compliance with mandatory requirements.

D - Call-off - Requirements marked 'D' are discretionary requirements for the call-off specification for which compliance is not considered to be essential. However, these requirements are deemed to be desirable.

LBSL/Wrightbus – Streetdeck H2 Double Deck Fuel Cell Bus Specification

1. Documentation

Documentation		
No.	Description	Type
1.1	National small series Type approval (NSSTA). It is necessary to apply for an approval in Great Britain and Northern Ireland from the Vehicle Certification Agency (VCA). VCA / DoENI are likely to require satisfactory evidence of compliance with Regulation (EC) No 79/2009 and Regulation (EU) No 406/2010 on Hydrogen powered vehicles. For more information on these, please contact VCA.	M Base
1.2	Documentary evidence of vehicle type approval at M3 class. I.e. compliance with ECE regulation 107 prior to order. Documentary evidence at <u>Annex I</u> received and agreed	M Call-off
Info	Prior to the delivery of the vehicle, the following must be provided by the manufacturer;	N/A
1.3	A copy of the legal drive-by test certificate. (Inclusive of brake valve and compressor noise test).	M Base
1.4	Documentary evidence that hydrogen storage cylinders are tested and approved in accordance with ISO 11439 (Gas cylinders -- High pressure cylinders for the on-board storage of natural gas as a fuel for automotive vehicles).	M Base
1.5	Designs in consideration with ECE Regulation 110.	M Base
1.6	Demonstrate design of hydrogen fuel systems in accordance to NFPA 52-2006 or equivalent	D Base
1.7	Vehicle must be designed with consideration for SAE J2578 (Recommended Practice for General Fuel Cell Vehicle Safety)	D Base
1.8	Vehicle must be designed with consideration for ISO 23273-1 (Fuel cell road vehicles -- Safety specifications -- Part 1: Vehicle functional safety) or equivalent	D Base
1.9	Vehicle must be designed with consideration for ISO 23273-2 (Fuel cell road vehicles -- Safety specifications -- Part 2: Protection against hydrogen hazards for vehicles fuelled with compressed hydrogen) or equivalent	D Base
1.10	Vehicle must be designed with consideration for ISO 23273-3 (Fuel cell road vehicles -- Safety specifications -- Part 3: Protection of persons against electric shock) or equivalent	D Base
1.11	A declaration from the manufacturer that all components in the bus meet the applicable specification in EC Regulations 118, or as specified in section 2.0 in this document	M Base
1.12	A laden and kerb / un-laden weight chart by axle and total against GVW for the complete bus Body Layout. Any significant changes to this standard must be notified. Un-laden weight has a relationship to fuel economy and buses should be designed to maximise their fuel economy.	M Base

1.13	Electromagnetic Compatibility (EMC) type approval to the requirements of the United Nations Economic Commission for Europe (UNECE) Regulation no 10.	M Base
1.14	Detailed general arrangement drawing to be supplied Drawings supplied and agreed, <u>Annex B, G, F, K</u>	M Call-off

2. Bus Design

Bus Design		
No.	Description	Type
2.1	Tender Requirements; <ul style="list-style-type: none"> Double deck, twin passenger door, two axle bus 	M Call-off
2.2	The heavy urbanised geography of London presents unique challenges compared to other operating environments across the UK and Europe. The tight winding streets are not suited to long vehicles, consequently the vehicle length cannot be greater than 11 metres.	M Call-off
2.3	A vehicle swept path analysis must be provided prior to vehicle order. The swept path should be no worse than a conventional double deck twin axle vehicle (excluding NRMs)	M Call-off
2.4	The buses must be full power FC (FC system as the dominating power source). The bus must convert hydrogen gas (stored on board) into electricity using a fuel cell. This electricity is used to provide the propulsion for the bus through its electric drivetrain creating zero tailpipe emissions. A hydrogen fuel cell bus will be classed as such if it is able to complete a full daily duty cycle using hydrogen only (i.e. no other fuel / energy source is required).	M Base
2.5	Buses must be designed as a right hand drive.	M Base
2.6	Completed buses must be low floor	M Base
2.7	Completed buses must be DDA compliant.	M Base
2.8	Wiring looms integrated	M Base
2.9	Design and selection of materials utilised must facilitate ease of cleaning and be maintained to a satisfactory level of appearance throughout the in service bus contract period.	M Base
2.10	All buses must conform to all relevant current legislation and take account of any intended legislative discussions that are considered imminent within the first 6 months of the bus's operational life.	M Base
	The bus should be capable of;	
2.11	High frequency stop start	M Base
2.12	Fully passenger laden PSV operational schedules	M Base
2.13	Operating in adverse traffic conditions during typical UK weather conditions.	M Base
2.14	Operating for typical performance parameters of 18 hours a day, 7 days a week, 364 days a year.	M Base

2.15	An average operational speed of between 6 to 12mph.	M Base
2.16	A minimum daily range of 190 miles (304 Kilometres) without the need to refuel the bus, throughout the entire life of the vehicle, operating on a typical London bus route duty cycle. Degradation of the fuel cell efficiency and HV battery capacity should be accounted for.	M Call-off
2.17	Quantity of on board storage should take into account variations in ancillary electrical loads over an annual period, such as heating, ventilation and lighting. Minimum range of 190 miles should consider a winter operating environment; therefore assume maximum ancillary loads operating over a 10 hour period of darkness during an 18 hour duty cycle.	M Call-off
2.18	Speed – capable of at least 80 km/hour	M Base
2.19	Acceleration – maximum rate of acceleration should be between 1.0 and 1.2 m/s ² under all load conditions.	M Base
2.20	Gradeability – 11% fully laden	M Base

3. Operational Design Life

Operational Design Life		
No.	Description	Type
3.1	The bus proposed must be designed suitably to achieve a minimum cost efficient operational life of 14 years	M Call-off
3.2	If high voltage batteries are used, the battery must be designed suitably so as to have an operational life of a minimum of 5 years, target 7 years	M Call-off

4. Environment

Environment		
No.	Description	Type
4.1	Vapour fumes above ambient temperature preferably should be exited at the offside rear roof. Near side is not permitted. The final position is to be agreed with LBSL	M Base

5. Fire Safety

Fire Safety		
No.	Description	Type
5.1	The supplier should identify and mitigate all health and safety risks associated with the supply and operation of fuel cell buses in accordance with the FMEA (failure mode and effect analysis) requirements. Analysis should cover a hydrogen leak from any at risk area. Documental evidence at <u>Annex E</u> supplied and agreed. .	M Call-off
5.2	Demonstrate design of hydrogen fuel systems in accordance to NFPA 52-2006 or equivalent standard.	M Base
5.3	All internal components in the bus not specified below must meet the applicable specification in EC Regulations 118.	M Base
	The minimum materials fire retardancy standards for each type of material used on a vehicle are;	
5.4	All materials forming fire barrier between fuel cell bay and passenger saloons, BS476 Class 1, on fuel cell facing surfaces. This overrides other points below.	M Base
5.5	All GRP materials utilised interior and exterior, BS476 Class 2 back surface.	M Base
5.6	All GRP materials utilised interior and exterior, BS476 Class 3 front surface.	M Base
5.7	Melamine Laminates (side or roof panels), BS476 Class 2.	M Base
5.8	All completed flooring (plywood or alternative, including floor covering) BS476 Class 2 on upper surface.	M Base
5.9	All completed flooring (plywood or alternative, including floor covering) BS476 Class 3 on lower surface.	M Base
5.10	Seat frames (ABS or Polycarbonate), UL94V0.	M Base
5.11	Seat assemblies, BS5452 Crib 7.	M Call-off
5.12	Body Insulation, BS 476 Class 2.	M Base
5.13	All internal ABS products (capping and finishing trims), UL94V0.	M Base
5.14	Body and Floor insulation, BS476 Class 2.	M Base
5.15	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.	M Base
5.16	Replacement components and their associated material must achieve the original standard.	M Base
5.17	The upper deck rear seated area, a concealed smoke detector is required with a warning device incorporated into the driver's audible information.	M Base
5.18	The output directional nozzle of all hydrogen storage pressure relief valves must be directed vertically upwards and positioned away from the most at risk areas of ignition such as electrical junction boxes & fuel cell bay.	M Base

5.19	A hydrogen leak detection system must be incorporated into areas where gas is likely to pool in the event of a leak. Integration into the fire suppression system driver warning system is advisable	M Call-off
5.20	<p>A full fuel cell bay fire risk assessment must be completed in conjunction with a fire suppression system (FSS) manufacturer who have the necessary expertise in co-ordination with LBSL & Metroline Ltd.</p> <p>The risk assessment and preventative measures must consider, at a minimum, a hydrogen leakage from any part of the storage of pipework, fire and serious collision scenarios. These scenarios should include the situation when the leak or fire occurs in a tunnel or under a bridge. The risk assessment should also include the maintenance regime and the scenarios which could occur when the vehicle is being worked on in an indoor space.</p> <p>The outputs from the risk assessment should mandate the type and location of any detection device and provide a detailed location for the dispensing tube or nozzles. It should also detail the FSS maintenance requirements. We expect as standard that all potential sources of fire in the fuel cell bay be protected by an effective FSS this includes any at risk areas behind the fuel cell such as electrical ancillaries and high voltage cables. This may increase the length of the trace tube or require additional nozzles. It might also have the affect of having to increase the capacity of the fire suppression cylinder. The suitable extinguisher for engine bay fires, including hydrogen, is deemed to be dry powder.</p> <p>Documental evidence to be submitted.</p>	M Base
5.21	Consideration for whether automatic venting of hydrogen tanks, from on board storage, on detection of a fire is to be considered.	D Base

6. Fire Suppression

Doors		
No.	Description	Type
6.1	The fuel cell and ancillaries compartment requires a fully automatic fire suppression system, capable of extinguishing a fire before serious bus damage is sustained or passenger safety is compromised. The system should provide accurate and early detection, and multi point dispensing, targeted at high-risk sections of the bay. Driver manual activation or override is not allowed. Driver audible notification on bus start up that the system is operative with immediate audible notification of fire detection is required. On fire detection, the hydrogen fuel system to the fuel cell module must be shut off to ensure no further fuel is supplied to the area.	M Base
6.2	<p>The fire suppression system must be type approved to meet regulation 107 Revision 6 - Amendment 3</p> <p>Documental evidence at Annex E supplied and agreed.</p>	M Call-off

6.3	A recommendation of fire suppression system manufacturer and model to be provided by vehicle manufacturer based upon the findings of the FMEA and fire risk assessment.	M Call-off
6.4	Fire suppression system to have a deployed and low pressure voice announcement. Must comply with appropriate UK/EU regulations if applicable.	M Call-off
6.5	Metroline's specification is that the engine bay must be able to contain a fire for a period of at least 15 minutes.	M Call-off

7. Emergency Shut Down

Emergency Shut Down		
No.	Description	Type
7.1	Engine /Electrical system emergency shut down buttons, driver to be able to re-start from cab. Once any engine / electrical drive system shut down has taken place, if there is no further activation of any components for a period of 10 minutes (or suitable period to prevent loss/damage of equipment/data) and the electrical master switch is still engaged the master relay will turn off as well as shutting all systems down.	M Call-off

8. Other Safety

Other Safety		
No.	Description	Type
8.1	All wheel arches fitted with tyre blow out protection liners.	M Base
8.2	Anti slip floor covering with joints minimised.	M Base
8.3	Colour contrasting step nosing must be used on all step edges in accordance with the PSVAR 2000.	M Base
8.4	Cross hatching (or any other marking) of the floor area, particularly forward of the "Do not stand forward of this point" sign is not allowed.	M Base
8.5	Particular attention should be made to ensure headroom at all positions throughout the bus is sufficient without the need to provide impact protection or warning notices.	M Base
8.6	If interior panel / corner finishing is utilised, it should be of suitable quality / standard to cope with high wear operation, and if damaged, should not present an immediate increased safety risk.	M Base
8.7	The buses are to be fitted with a substantial offside & near side front tree guards, located into the structure of the bus.	M Call-off
8.8	Emergency Exits – in addition to emergency controls on main entrance and exit doors, on Double Door configurations an emergency exit only door will not be required however break glass hammers or alternative means of emergency escape must be provided via main saloon windows.	M Base
8.9	<p>LBSL is developing a world leading Bus Safety Standard, the first phase of the standard specification was issued in December 2018.. LBSL require the supplier to make reasonable provisions, in alignment with the supplier's bus build schedule, to allow for contract variations to encompass the following safety countermeasures which could feature in the first Bus Safety Standard publication.</p> <ol style="list-style-type: none"> 1. Acoustic Vehicle Alerting System – This countermeasure will comply with all requirements of EU Reg. 540/2014, Annex VIII. 2. Pedal Confusion – Will likely feature a halt brake system requiring a driver brake pedal activation post release of the handbrake or closure of passenger doors to disengage. In addition, may feature driver display lights indicating an accelerator or brake pedal activation within the driver's line of sight. 3. Flooring – The floor material with a specified slip resistance such as metal encapsulated vinyl or grooves designed to channel water. 4. Interior Layout – Interior design features such as hand poles, seat position, sharp edges etc. will be assessed for likely areas of injuries based on evidence collected from vehicle collisions. 5. Runaway Vehicle Prevention – A device that monitors driver seat and cab door position for the presence of a driver. System is linked to the pneumatic park brake system to prevent a runaway vehicle incident, whether transmission in drive, neutral or reverse. 6. Direct & Indirect Vision – Enhancements to driver vision equipment and vehicle design. Potentially will include; Camera Monitoring System, alterations to reduce driver blind spot areas & driver assault screen transparency. 	M Call-off

<p>8.10</p>	<p>For avoidance of doubt, all safety standard specification requirements detailed in sections 8.9, 30.1, 30.2, 16.1 of this document shall comply in full with the most recent publication of the LBSL Bus Safety Standard Specification at the point of vehicle order. Current version – V.10 December 2018.</p> <p>BAFO price submission from Wright Bus stating bus safety standard requirements prices (sections 8.9, 30.1, 30.2, 16.1) are estimates only. Wright Bus shall adapt the Streetdeck H2 bus specification to comply with the most recent publication of the LBSL Bus Safety Standard Specification (section 8.9) after further clarifications have been released by LBSL. Consequently LBSL and Wrightbus agree to a contract price variation for each system on an open book basis.</p>	<p>M Call-off</p>
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9. General Dimensions

The vehicle design should comply with the following dimensions:

		Double deck 10 to 10.9 metre overall length	
		Min	Max
Overall Width	Metres	2.5	2.55
Overall Height	Metres	4.2	4.42
Aisle headroom at centre line	Metres	1.83	
Seat width	Mm	440	
Top of seat back	Mm	590	
Bottom of seat back	Mm	535	
Objective wheelchair space	Metres	1.6	2
Objective seat pitch	Mm	750	850
Entrance and exit step height	Mm		320
Kneeling to	Mm	265	240
Entrance and exit door headroom	Mm	1840	
Entrance door clear width	Mm	1035	
Exit door clear width	Mm	1100	

10. Passenger Capacity

Passenger Capacity		
No.	Description	Type
10.1	Absolute minimum total passenger capacity required for a double deck bus is 80 passengers. The bus supplier, Wrightbus, must continue to endeavour to increase total passenger capacity using all appropriate methods, post vehicle order. The final passenger capacity and any consequential changes to the vehicle specification, as defined in this document, must be mutually agreed between Wrightbus and LBSL prior to the manufacturer's vehicle build stage commencing. Build stage date to be defined on submission of LBSL's vehicle delivery plan.	M Call-off

11. Noise

Noise		
No.	Description	Type
Info	Efforts should be made to minimize vehicle noise and vibration, to maximize the passengers' benefits of no diesel engine.	N/A
11.1	Type Approved drive-by noise test to the requirements of part a of ECE regulation 51.02 (or as latest amended).	D Base
11.2	For all vehicles, the manufacturer must provide the designated testing authority with information on how to (or a mechanism to) artificially operate the engine cooling fans / auxiliary equipment at its maximum specified rpm.	M Base
	Permitted noise levels are;	
11.3	Exterior of vehicle, pass by noise test to the requirements of ECE regulation 51 (as amended, test results = Hybrid vehicles, legal limit 79 db. (a).	M Base
11.4	Door buzzer, interior noise measured at 1m from the floor at centreline of vehicle and exit door. Limit = 75 db. (a)	M Base
11.5	Driver control ramp buzzer exterior noise measured at 1.5m from the vehicle, adjacent to the centre door and at 1.2m from the floor. limit = 75 db.(a)	M Base
11.6	Wide Open Throttle (WOT) acceleration from standstill to 16km/h. exterior of vehicle, 1.5m from the side of the vehicle adjacent to the front doors. 1.2m from the floor. Noise limit = 78 db. (a).	M Base
11.7	WOT acceleration from 16km/h to 40km/h. interior of vehicle, 1m height, on centreline of bus on front axle and rear axle datum. Noise limit = no more than 72 db. (a).	M Base

12. Doors

Doors		
No.	Description	Type
12.1	A twin door bus with the entrance door forward of the front axle and the exit door between front and rear axle.	M Call-off
12.2	The preferred manufacturer of driver operated powered doors is Ventura	D Call-off
12.3	Entrance to provide an individual clear width of 1035mm minimum and utilise an equal width two door leaf closure.	M Base
12.4	Exit doors to provide an individual clear width of 1200mm minimum (excluding door mounted handrails) and utilise an equal width two door leaf closure.	M Base
12.5	Front, entrance to be inward glider type, flush fitting to the body side when closed and one piece full depth glass in each door leaf for maximum driver view of kerb side.	M Base

12.6	Centre or rear, entrance or exit doors to be outward slider type, flush fitting to the body side when closed and one piece full depth glass in each door leaf for maximum view of kerb side.	M Base
12.7	All door header panels must provide adequate prevention against finger ingress to the door operation mechanism.	M Base
12.8	Door or door partition handrails positioned to assist boarding and alighting must be fitted at all entrance and exit points.	M Base
12.9	The emergency door controls fitted to entrance and exit doors must be disabled automatically by way of an interlock, when the bus is travelling at speeds above 5kph.	M Base
12.10	Overhead illumination, of door opening area must be provided at minimum level of 100 Lux.	M Base
12.11	Door closing audible warning device on all exit doors, to be of beeping sound and not to exceed 75dba, when measured at 1m height from the body floor on centre line of the bus and exit door.	M Base
Info	Note: White sound noise type will also be considered. Voice or other tones are not acceptable. Warning on exit door opening is not permitted.	N/A

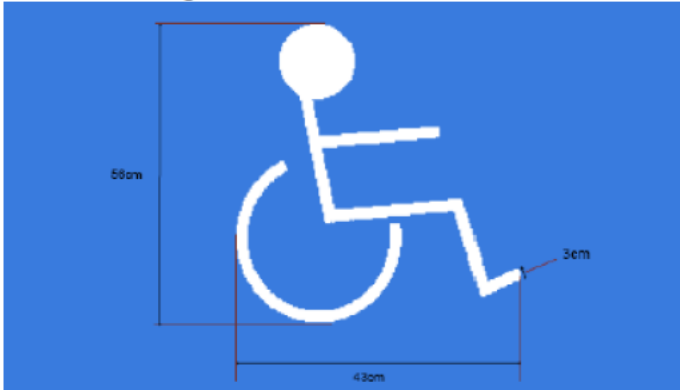
13. Seating

Seating		
No.	Description	Type
13.1	Individual passenger seats of minimum 440mm width at all positions, including moulded panel areas. Exceptions maybe considered on a case by case basis.	M Base
13.2	Tip up seats are not preferred however if a saloon seating layout can be further optimised when the wheelchair bay length is greater than 1.6 metres, tip up seats will be considered.	M Call-off
13.3	Seat type – Esteban, Civic V2 lightweight version, with USB socket Seat Frame – Esteban, colour blue Seat fillings Fire retardant foam, standard class 1	M Call-off
13.4	Seats should be suitably designed to restrict the potential of pickpockets to operate whilst utilising the seating immediately rearward.	M Base
13.5	Forward facing seats are the preferred layout, except where the chassis design function over wheel boxes necessitates inward or rearward facing.	M Base
13.6	A minimum of 4 priority seats which at least meet the legal space requirement in the low floor area for disabled passengers and must be clearly identified with signage.	M Base
13.7	A further 2 preferential passenger seats of similar space requirement to the priority seats, in the low floor area, for passengers who are less able to stand or travel with small children. These must be clearly identified by the standard (LBSL Issue) notice.	D Base
13.8	Priority or preferential seating on the low floor area shall have under seat space maximised as much as possible to free the under seat space for use by guide/assistance dogs.	D Base
13.9	For the priority or preferential seating on the low floor area, the height to top of seat cushion should be approx. 490mm to maximise under seat space.	M Base

14. Ramp

Ramp		
No.	Description	Type
14.1	Be mounted underneath centre doors and power operated by driver controls	M Call-off
14.2	Telescopic two-stage plane ramp platform type with minimal deviations in surface plane, minimum length 1m. Access ramps must function on all kerb surfaces likely to be encountered on London streets.	M Call-off
14.3	Protection of the ramp from damage is a priority and specific attention should be given to its installation to improve operational reliability.	M Call-off
14.4	Ramp deployment audible warning device at door to be of 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.	M Call-off
14.5	On every start up of the bus, the ramp mechanism must automatically undertake a partial operation extending cycle of approximately a 50mm deployment to test the ramp and remove any loose dirt or debris from ramp mechanisms. The ramp deployment audible warning device must not sound during this test operation.	M Call-off
14.6	If operation of the ramp fails in service a permanent warning light must be displayed in the drivers cab until a successful ramp operation occurs.	M Call-off
14.7	The ramp forward edge is to be recessed at the centre door from the main bodywork exterior by not less than 25mm but ideally where possible 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	M Call-off
14.8	On deployment of the ramp the bus must be prevented from any movement via an interlock. The interlock should be released only once the ramp is fully and securely stowed.	M Call-off

15. Wheelchair Bay

Wheelchair Bay		
No.	Description	Type
15.1	The wheelchair bay is to be located on the off side, opposite the wheelchair entrance / exit door. Wheelchair bay length is to be at a minimum of 1.60m but where the layout will allow a length up to 2m is desirable. To confirmed on order.	M Call-off
15.2	The wheelchair interior manoeuvring area and the ramp deployment area must be monitored by CCTV and displayed on the driver's cab monitor when doors are open on double door configurations.	M Call-off
15.3	Special attention is required in this area to ensure anti-slew hand poles and vertical hand poles do not compromise access and egress to the wheelchair bay area. All layouts must be agreed prior to order.	M Base
15.4	Wheelchair bay to provide alternative buggy space and standing area when not in use for wheelchair location. Suitable hand rails and leaning rails must be provided for this purpose.	M Base
15.5	The wheelchair bay area wheelchair security floor to ceiling handrail must have two bell pushes. The lower (blue button, facing forwards) to activate ramp request (as PSVAR2000) and a higher (red button, facing rearwards) as a standard bell push. Blue bell push to activate an alternative sound and independent driver's cab ramp request light to the standard bell push. Light must remain illuminated until passenger doors have completed a cycle, the bell push should sound on every bell activation.	M Base
15.6	A manual or automatic security arm replacing the floor to ceiling handrail is not permitted.	M Base
15.7	<p>A wheelchair logo is to be incorporated into the floor covering, readable as you face the off side (The logo displaying the rearward facing position of the wheelchair). The full wheelchair bay area to be in blue (as close as possible to the blue used on the wheelchair notice, PMS 300) and the wheelchair logo in white. The wheelchair logo must comply in size and image as below.</p> 	M Call-off
15.8	Floor covering of the total wheel chair bay 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.	M Call-off
15.9	The logo in the wheelchair floor area should be of the identical style to the above and be approximately to the stated dimensions.	M Call-off

15.10	The logo in the wheel chair bay should always be positioned to demonstrate the actual position of the wheelchair.	M Call-off
15.11	The horizontal centre line of the logo should be on the centre line of the vertical wheel chair back board and be no more than 550mm from the front of the wheelchair board to the centreline of the logo.	M Call-off
15.12	On activation of the bus kneeling system from the drivers cab to assist a wheel chair or less able passenger to board, the bus must be prevented from any movement via an interlock. The interlock should be released only once the suspension is returned to the correct ride height.	M Call-off

16. Flooring

Flooring		
No.	Description	Type
16.1	Floor covering - Type Gelflor Polaris NT. ISLAY. BEF202/01. Wheel chair area to be Safe Bus NT 6203 BORNEO.	M Call-off

17. Windows and Glazing

Windows and Glazing		
No.	Description	Type
17.1	All windows and glazing to meet ECE Regulation 43.	M Base
17.2	All side glass windows (excluding doors and driver's signal window) of identical tinted glass, where legally permitted.	M Base
17.3	Solar energy transmittance of not more than 65%	M Base
17.4	Light transmittance of not more than 80%.	M Base
17.5	Passenger opening side windows of hopper design are to be provided at all full size bays.	M Base
17.6	It is expected that at least 11% of the total surface side glass area (excluding door glass and destination glass) will be of the open hopper type providing an open area air gap of not less than 3.5%	M Call-off
17.7	Driver's cab signalling window to be fitted with anti bandit glazing.	M Base
17.8	Driver's front screen to have top tinted section or a suitable sunblind.	M Base

18. Staircase

Staircase		
No.	Description	Type
18.1	A forward ascending 9 step straight staircase with a step tread depth not less than 230mm, and a step riser of not more than 245mm.	M Base
18.2	Hand rails must be provided to both sides of staircase, continuous throughout its profile, with no potential hand traps	M Base
18.3	An additional off side (body panel side) horizontal handrail on the staircase is required, to improve passengers' handhold options when using the staircase.	M Base
18.4	Exposed butt ends to handrails are not acceptable anywhere on the staircase or its access	M Base
18.5	Particular attention should be made to ensure headroom at staircase lower steps is achieved without the need to provide impact protection. Finishing edges should be high quality moulded covers that cope with high passenger volume operation	M Base
18.6	If transparent materials are used to provide the aisle side staircase panel in the lower salon, it should be of obscured material to achieve a decency screen for staircase users.	M Base

19. Driver's Cab

Driver's Cab		
No.	Description	Type
Info	The general layout should be considered suitable as a working environment and be ergonomically designed to assist and protect the driver.	N/A
19.1	Cab screen demisting system is to be fully controlled by the driver and capable of independent operation to the saloon heating, upper deck cooling or cab air conditioning.	M Base
19.2	Driver must be further protected by an independent "siren / common network fleet sound" assault alarm also activating the bus hazard lights.	M Base
19.3	Driver's vandal screen is to be provided utilising an appropriate protective material. The screen should be suitably mounted to fully protect the driver from assault with particular attention given to the door security and the area between the door and the front screen. The installation and fixings in these areas must be able to withstand sustained physical attack without becoming insecure and putting the driver at risk. The screen must be rattle proof, free of any serious reflections and not restrict or distort driver view to passenger entrance, wing mirrors or forward exterior view and comply with LBSL direct vision bus safety standard specification	M Base
19.4	Driver operated PA system (for driver to passenger communications) will be provided as part of the iBus system.	M Call-off
19.5	The cab area must be designed to accommodate the ticketing equipment as described in electrical section and in the specification document "Guidelines for Bus Builders for the installation of Ticket Machines with Smart Card Readers", published by LBSL.	M Call-off
19.6	The cab area must be designed to accommodate the iBus system as described in section 4.3.2, 4.9 and 4.10 of the generic iBus installation manual (BHN01 1709 70V15) with details of the optimal and acceptable zones recommended for placement in the cab of the driver's iBus MDT terminal, microphone and speakers.	M Call-off
19.7	Power supplies to be maintained to the card reader for 30 minutes after shutdown.	M Call-off
19.8	Drivers cab seat is to be a Chapman Side Riser 2	M Call-off

20. Heating and Ventilation

Heating and Ventilation		
No.	Description	Type
20.1	Passenger saloon general ventilation should be provided by opening (hopper vent) side windows.	M Base
20.2	Buses must be fitted with a minimum of a fully automatically temperature controlled climate system. No driver cab or engine bay operation should be necessary to adjust or set the passenger saloon climate system during variations of temperature over the summer and winter periods.	M Base
Heating		
20.3	Capable of raising the temperature from zero to 15°C in 45 minutes. Test should include the both doors opening for 10 seconds at a time to simulate 15 bus stops in the first 25 minutes and 13 in the next 20 minutes. Maximum air vent velocity of 5 m/s. Diesel powered heating systems are not permitted	M Call-off
Cab / Driver's Screen Demisting		
20.4	Manual Driver selection, capable of independent operation at all times and raising the temperature from zero to 20° within 25 minutes. Test should include the both doors opening for, 10 seconds at a time to simulate 15 bus stops in the first 25 minutes and 13 in the next 20 minutes. Maximum air vent velocity of 5 m/s.	M Call-off
Drivers Cab Air Conditioning		
20.5	Driver 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, must be capable of reducing the temperature from 35°C to 25°C within 25 minutes. Test should include the both doors opening for 10 seconds at a time to simulate 15 bus stops in the first 25 minutes	M Call-off
Air Cooling		
20.6	Air Cooling (Upper Deck Only) - Off <23°C, fully shut down, On >23°C, gradual build up to maximum capacity output at 28°C. A maximum cooling capacity capable of a reduction of 5°C is required when interior saloon temperature is 30°C over a 30 minute pull down test. If driver's cab air conditioning is off, upper deck air-cooling will function independently on its automatic temperature settings. Installation and positioning of the cooling system equipment / components / vents which is unobtrusive to passengers, and presents no safety hazards.	M Call-off
20.7	Installation and positioning of the cooling system equipment / components / vents which is unobtrusive to passengers, and presents no safety hazards.	M Call-off
20.8	Integration of these system into the fully automatic heating and ventilation system to avoid operational conflicts and maintain operation.	M Call-off