Procurement, Supply, Operation and Maintenance of 20 Double Decker Air-Conditioned Electric Buses and Development of Allied Electric and Civil Infrastructure on Gross Cost Contracting

Volume II

DRAFT CONCESSION AGREEMENT

CONTENTS

ARTICLE 1 DEFINITIONS AND INTERPRETATION 3
1.2 INTERPRETATION 3
1.3 MEASUREMENTS AND ARITHMETIC CONVENTIONS 5
1.4 PRIORITY OF AGREEMENTS, CLAUSES AND SCHEDULES 6
ARTICLE 2 SCOPE OF THE AGREEMENT 8
ARTICLE 3 AWARD OF CONCESSION 9
ARTICLE 4 CONDITIONS PRECEDENT 10
4.2 SATISFACTION OF THE CONDITIONS PRECEDENT 12
4.3 DAMAGES FOR DELAY BY THE AUTHORITY 12
4.4 DAMAGES FOR DELAY BY THE OPERATOR 13
4.5 DEEMED TERMINATION UPON DELAY 13
ARTICLE 5 OBLIGATIONS OF THE OPERATOR 15
5.2 OBLIGATIONS RELATING TO PROJECT AGREEMENTS 17
5.3 OBLIGATIONS RELATING TO CHANGE IN OWNERSHIP 19
5.4 OBLIGATIONS RELATING TO EMPLOYMENT OF FOREIGN NATIONALS 20
5.5 OBLIGATIONS RELATING TO EMPLOYMENT OF PERSONNEL 21
5.6 ADVERTISEMENT AND BRANDING OF BUSES 23
5.7 OBLIGATIONS REGARDING RISK OF LOSS OR DAMAGE 23
5.8 OBLIGATIONS RELATING TO INFORMATION 23
5.9 OBLIGATIONS RELATING TO AESTHETIC QUALITY 24
5.10 OBLIGATIONS RELATING TO NOISE CONTROL 24
5.11 FACILITIES FOR PHYSICALLY CHALLENGED AND ELDERLY PERSONS 24
5.12 OBLIGATIONS RELATING TO CHARGING INFRASTRUCTURE 24
5.13 OBLIGATIONS RELATING TO APPOINTMENT OF DRIVERS AND STAFF 25
5.14 OBLIGATIONS OF THE OPERATOR UNDER LABOUR CODES AND RULES 26
ARTICLE 6 OBLIGATIONS OF THE AUTHORITY 28
ARTICLE 7 REPRESENTATIONS AND WARRANTIES 31
7.2 REPRESENTATIONS AND WARRANTIES OF THE AUTHORITY 33
7.3 DISCLOSURE 33
ARTICLE 8 DISCLAIMER 35
ARTICLE 9 PERFORMANCE SECURITY 37
9.2 APPROPRIATION OF PERFORMANCE SECURITY 37
9.3 RELEASE OF PERFORMANCE SECURITY 37
ARTICLE 10 RIGHT OF WAY FOR DEPOTS 39
10.2 LICENCE AND RIGHT OF WAY FOR MAINTENANCE DEPOT 39
10.3 HANDOVER OF THE LICENSED PREMISES 41
10.4 MAINTENANCE DEPOT TO BE FREE FROM ENCUMBRANCES 42
10.5 PROTECTION OF SITE FROM ENCROACHMENTS 42
10.6 ACCESS TO THE AUTHORITY 42
10.7 GEOLOGICAL AND ARCHAEOLOGICAL FINDS 42
10.8 FELLING OF TREES 43
10.9 UNFORESEEN SITE CONDITIONS 43
ARTICLE 11 UTILITIES, ASSOCIATED ROADS AND TREES 44
11.2 SHIFTING OF OBSTRUCTING UTILITIES 44
11.3 NEW UTILITIES AND TRANSPORT SYSTEMS 44
ARTICLE 12 COMPLETION OF THE MAINTENANCE DEPOTS 45
12.2 OBLIGATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION 45
12.3 MAINTENANCE DURING FIT OUT PERIOD 45
12.4 DRAWINGS 46
12.5 COMPLETION OF THE MAINTENANCE DEPOTS 47
12.6 EXTENSION OF TIME 48
ARTICLE 13 PROCUREMENT OF BUSES 50
13.2 OWNERSHIP OF BUSES 50

13.3 DELIVERY SCHEDULE 50
13.4 PROTOTYPE 50
13.5 TESTS AT MANUFACTURER'S PLANT 51
13.6 SUPPLY OF PROTOTYPE 52
13.7 ACCEPTANCE OF PROTOTYPES 52
13.8 PROCUREMENT OF BUSES 52
13.9 DELAY IN PROCUREMENT 53
13.10 READINESS FOR COMMENCEMENT OF SERVICE 53
ARTICLE 14 ENTRY INTO COMMERCIAL SERVICE 54
14.2 COMMERCIAL OPERATION DATE (COD) FOR RESPECTIVE LOT OF BUSES 55
14.3 DAMAGES FOR DELAY 56
14.4 DAMAGE DUE TO ACCIDENT 56
ARTICLE 15 CHANGE OF SCOPE 58
15.2 PROCEDURE FOR CHANGE OF SCOPE 58
15.3 PAYMENT FOR CHANGE OF SCOPE 59
15.4 RESTRICTIONS ON CERTAIN WORKS 59
ARTICLE 16 OPERATION OF BUSES 61
16.2 MAINTENANCE DEPOT 61
16.3 OPERATION MANUAL 61
16.4 ROUTES AND SCHEDULES 62
16.5 DEPLOYMENT PLAN 63
16.6 INCIDENTS EN-ROUTE 65
16.7 ADVERTISING ON BUSES AND MAINTENANCE DEPOTS 66
16.8 USER FARE 66
ARTICLE 17 MAINTENANCE OF BUSES 68
17.2 MAINTENANCE MANUAL 68
17.3 SPARES AND CONSUMABLES 69
17.4 MAINTENANCE REQUIREMENTS 69
17.5 DAMAGES FOR BREACH OF MAINTENANCE OBLIGATIONS 70
17.6 DEMOBILISATION DUE TO EMERGENCY 70
17.7 AUTHORITY'S RIGHT TO TAKE REMEDIAL MEASURES 70
17.8 OVERRIDING POWERS OF THE AUTHORITY 71
17.9 RESTORATION OF LOSS OR DAMAGE TO THE BUSES 72
17.10 MODIFICATIONS TO THE BUSES 72
17.11 OPERATION ASSISTANCE 72
17.12 EXCUSE FROM PERFORMANCE OF OBLIGATIONS 72
17.13 WARRANTIES FOR DEFECTS AND DEFICIENCIES 73
17.14 MAINTENANCE DEPOTS 74
ARTICLE 18 SAFETY REQUIREMENTS 75
18.2 GUIDING PRINCIPLES 75
18.3 OBLIGATIONS OF THE OPERATOR 75
18.4 SAFETY MEASURES DURING FIT OUT WORKS 76
18.5 ANNUAL SAFETY REPORT 76
ARTICLE 19 MONITORING OF OPERATION AND MAINTENANCE 77
19.2 ACCIDENT REPORTING 77
19.3 INSPECTION 77
19.4 TESTS 78
19.5 REMEDIAL MEASURES 78
19.6 RESPONSIBILITY OF THE OPERATOR 78
19.7 REAL TIME DATA ACCESS 78
ARTICLE 20 KEY PERFORMANCE INDICATORS 79
20.2 RELIABILITY 79
20.3 OPERATIONAL AVAILABILITY 79
20.4 PUNCTUALITY 81
20.5 FREQUENCY 82
20.6 SAFETY OF OPERATIONS 83
20.7 OPERATIONAL INFRACTIONS 83

20.8 MONTHLY REPORT 84
20.9 PASSENGER CHARTER 84
20.10 CAP ON DAMAGES FOR FAILURE TO ACHIEVE KEY PERFORMANCE INDICATORS 84
20.11 CAP ON INCENTIVES FOR EXCEEDING TO ACHIEVE KEY PERFORMANCE INDICATORS 84
20.12 INITIAL OPERATING PERIOD 84
ARTICLE 21 FINANCIAL CLOSE 86
21.2 TERMINATION DUE TO FAILURE TO ACHIEVE FINANCIAL CLOSE 86
ARTICLE 22 FEE AND INVOICE 87
22.2 PAYMENT OF INVOICE AMOUNT 88
22.3 ASSURED KILOMETRES 89
22.4 REVISION OF FEE 90
22.5 ELECTRICITY COST 90
22.6 PAYMENT SECURITY TO THE OPERATOR 92
ARTICLE 23 DAMAGES FOR DELAY 93
ARTICLE 24 TRANSFER OF MAINTENANCE DEPOT 94
ARTICLE 25 INSURANCE 95
25.2 INSURANCE COVER 95
25.3 NOTICE TO THE AUTHORITY 95
25.4 EVIDENCE OF INSURANCE COVER 96
25.5 REMEDY FOR FAILURE TO INSURE 96
25.6 WAIVER OF SUBROGATION 96
25.7 OPERATOR'S WAIVER 96
25.8 APPLICATION OF INSURANCE PROCEEDS 96
25.9 COMPLIANCE WITH CONDITIONS OF INSURANCE POLICIES 97
ARTICLE 26 ACCOUNTS AND AUDIT 98
26.2 APPOINTMENT OF AUDITORS 98
26.3 CERTIFICATION OF CLAIMS BY STATUTORY AUDITORS 99
26.4 SET-OFF 99
26.5 DISPUTE RESOLUTION 99
ARTICLE 27 ESCROW ACCOUNT 100
27.2 DEPOSIT IN ESCROW ACCOUNT 100
27.3 WITHDRAWAL DURING CONCESSION PERIOD 101
27.4 WITHDRAWAL UPON TERMINATION 101
ARTICLE 28 TRAFFIC REGULATION AND SECURITY 103
28.2 SECURITY 103
ARTICLE 29 FORCE MAJEURE 105
29.2 NON-POLITICAL EVENT 105
29.3 INDIRECT POLITICAL EVENT 106
29.4 POLITICAL EVENT 106
29.5 DUTY TO REPORT FORCE MAJEURE EVENT 107
29.6 EFFECT OF FORCE MAJEURE EVENT ON THE CONCESSION PERIOD 108
29.7 ALLOCATION OF COSTS ARISING OUT OF FORCE MAJEURE 108
29.8 TERMINATION NOTICE FOR FORCE MAJEURE EVENT 109
29.9 TERMINATION PAYMENT FOR FORCE MAJEURE EVENT 109
29.10 DISPUTE RESOLUTION 109
29.11 EXCUSE FROM PERFORMANCE OF OBLIGATIONS 110
ARTICLE 30 COMPENSATION FOR BREACH OF AGREEMENT 111
30.2 COMPENSATION FOR DEFAULT BY THE AUTHORITY 111
30.3 EXTENSION OF CONCESSION PERIOD 111
30.4 COMPENSATION TO BE IN ADDITION 111
30.5 MITIGATION OF COSTS AND DAMAGE 111
ARTICLE 31 SUSPENSION OF OPERATOR'S RIGHTS 112
31.2 AUTHORITY TO ACT ON BEHALF OF OPERATOR 112
31.3 REVOCATION OF SUSPENSION 112
31.4 TERMINATION 113
ARTICLE 32 TERMINATION 114
32.2 TERMINATION FOR AUTHORITY DEFAULT 117

32.3 TERMINATION PAYMENT 117
32.4 CERTAIN LIMITATIONS ON TERMINATION PAYMENT 118
32.5 OTHER RIGHTS AND OBLIGATIONS OF THE AUTHORITY 119
32.6 SURVIVAL OF RIGHTS AND OBLIGATIONS 120
ARTICLE 33 DIVESTMENT OF RIGHTS AND INTEREST 121
33.2 INSPECTION AND CURE 122
33.3 COOPERATION AND ASSISTANCE ON TRANSFER OF MAINTENANCE DEPOT 122
33.4 DIVESTMENT REQUIREMENTS UPON TERMINATION 122
33.5 VESTING CERTIFICATE 124
33.6 DIVESTMENT COSTS ETC. 124
ARTICLE 34 DEFECTS LIABILITY AFTER TERMINATION 126
34.2 RETENTION IN ESCROW ACCOUNT 126
ARTICLE 35 ASSIGNMENT AND CHARGES 129
35.2 RESTRICTIONS ON ASSIGNMENT AND CHARGES 129
35.3 PERMITTED ASSIGNMENT AND CHARGES 129
35.4 SUBSTITUTION AGREEMENT 129
35.5 ASSIGNMENT BY THE AUTHORITY 130
ARTICLE 36 CHANGE IN LAW 131
36.2 REDUCTION IN COSTS 131
36.3 PROTECTION OF NPV 132
36.4 RESTRICTION ON CASH COMPENSATION 132
ARTICLE 37 LIABILITY AND INDEMNITY 133
37.2 INDEMNITY BY THE OPERATOR 133
37.3 NOTICE AND CONTEST OF CLAIMS 134
37.4 DEFENCE OF CLAIMS 134
37.5 NO CONSEQUENTIAL CLAIMS 136
37.6 LIMITATION OF LIABILITY 136
37.7 SURVIVAL ON TERMINATION 136
ARTICLE 38 RIGHTS AND TITLE OVER SITES 137
38.2 ACCESS RIGHTS OF THE AUTHORITY AND OTHERS 137
38.3 PROPERTY TAXES 137
38.4 RESTRICTION ON SUB-LETTING 137
ARTICLE 39 DISPUTE RESOLUTION 138
ARTICLE 40 DISCLOSURE 140
40.2 DISCLOSURE OF DOCUMENTS RELATING TO SAFETY 140
40.3 WITHHOLDING DISCLOSURE OF PROTECTED DOCUMENTS 140
ARTICLE 41 REDRESSAL OF COMPLAINTS 141
41.2 REDRESSAL OF COMPLAINTS 141
ARTICLE 42 MISCELLANEOUS 142
42.2 WAIVER OF IMMUNITY 142
42.3 DEPRECIATION 142
42.4 DELAYED PAYMENTS 142
42.5 WAIVER 143
42.6 LIABILITY FOR REVIEW OF DOCUMENTS AND DRAWINGS 143
42.7 EXCLUSION OF IMPLIED WARRANTIES ETC. 143
42.8 SURVIVAL 144
42.9 ENTIRE AGREEMENT 144
42.10 SEVERABILITY 144
42.11 NO PARTNERSHIP 145
42.12 THIRD PARTIES 145
42.13 SUCCESSORS AND ASSIGNS 145
42.14 NOTICES 145
42.15 LANGUAGE 146
42.16 COUNTERPARTS 146
ARTICLE 43 DEFINITIONS 147

SCHEDULES 165

SCHEDULE-A: SITE OF THE MAINTENANCE DEPOT **166**
SCHEDULE-B: SPECIFICATIONS AND STANDARDS **168**
SCHEDULE-C : APPLICABLE PERMITS **169**
SCHEDULE-D : PERFORMANCE SECURITY **170**
SCHEDULE-E : MAINTENANCE DEPOT COMPLETION SCHEDULE **173**
SCHEDULE-F : DESIGN AND DRAWINGS **174**
2 ADDITIONAL DESIGNS AND DRAWINGS 174
3 BUS DESIGNS AND DRAWINGS 174
SCHEDULE-G : DELIVERY SCHEDULE **175**
SCHEDULE-H : TESTS **176**
ANNEX - I TYPE TESTS 178
SCHEDULE-I : OPERATION AND MAINTENANCE REQUIREMENTS **179**
SCHEDULE-J : DEPLOYMENT PLAN **181**
SCHEDULE-K : SAFETY REQUIREMENTS **182**
1. GENERAL SAFETY REQUIREMENTS 182
2. SAFETY PLANNING 182
3. SAFETY MANAGEMENT 182
4. APPLICABLE LAWS 182
5. RESPONSE TO EMERGENCIES 182
6. REPORTING OF INCIDENTS 183
SCHEDULE-L: MAINTENANCE DEPOT EQUIPMENT **184**
(SEE CLAUSE 17.1) **184**
SCHEDULE-M : ESCROW AGREEMENT **186**
AMONGST **186**
1. DEFINITIONS AND INTERPRETATION **187**
1.1 DEFINITIONS 187
1.2 INTERPRETATION 188
2 ESCROW ACCOUNT **189**
2.1 ESCROW BANK TO ACT AS TRUSTEE 189
2.2 ACCEPTANCE OF ESCROW BANK 189
2.3 ESTABLISHMENT AND OPERATION OF ESCROW ACCOUNT 189
2.4 ESCROW BANK'S FEE 190
2.5 RIGHTS OF THE PARTIES 190
2.6 SUBSTITUTION OF THE OPERATOR 190
3 DEPOSITS INTO ESCROW ACCOUNTS **191**
3.1 DEPOSIT BY THE AUTHORITY 191
3.2 INTEREST ON DEPOSITS 191
3.3 DEPOSIT BY THE OPERATOR 191
3.4 DEPOSIT FROM THE DESIGNATED ACCOUNT 191
3.5 DEPOSITS BY SENIOR LENDERS 192
4.1 WITHDRAWALS DURING CONCESSION PERIOD 192
4.2 WITHDRAWALS UPON TERMINATION 192
4.3 APPLICATION OF INSUFFICIENT FUNDS 193
4.4 APPLICATION OF INSURANCE PROCEEDS 193
5 OBLIGATIONS OF THE ESCROW BANK **193**

5.1 SEGREGATION OF FUNDS 193
5.2 NOTIFICATION OF BALANCES 193
5.3 COMMUNICATIONS AND NOTICES 194
5.4 NO SET OFF 194
5.5 REGULATORY APPROVALS 194
6 ESCROW DEFAULT 194
6.1 AUTHORITY DEFAULT 195
6.1.1 OPERATOR DEFAULT 195
7 TERMINATION OF ESCROW AGREEMENT 196
7.1 DURATION OF THE ESCROW AGREEMENT 196
7.2 SUBSTITUTION OF ESCROW BANK 196
7.3 CLOSURE OF ESCROW ACCOUNT 196
8 SUPPLEMENTARY ESCROW AGREEMENT 196
8.1 SUPPLEMENTARY ESCROW AGREEMENT 196
9 INDEMNITY 197
9.1 GENERAL INDEMNITY 197
9.2 NOTICE AND CONTEST OF CLAIMS 197
10 DISPUTE RESOLUTION 198
10.1 DISPUTE RESOLUTION 198
11 MISCELLANEOUS PROVISIONS 198
11.1 GOVERNING LAW AND JURISDICTION 198
11.2 WAIVER OF SOVEREIGN IMMUNITY 198
11.3 PRIORITY OF AGREEMENTS 198
11.4 ALTERATION OF TERMS 199
11.5 WAIVER 199
11.6 NO THIRD-PARTY BENEFICIARIES 199
11.7 SURVIVAL 199
11.8 SEVERABILITY 199
11.9 SUCCESSORS AND ASSIGNS 200
11.10 NOTICES 200
11.11 LANGUAGE 200
11.12 AUTHORISED REPRESENTATIVES 200
11.13 ORIGINAL DOCUMENT 200
IN WITNESS WHEREOF THE PARTIES HAVE EXECUTED AND DELIVERED THIS 200
SCHEDULE-N : STAFFING QUALIFICATIONS 202
SCHEDULE-O: VESTING CERTIFICATE 203
SCHEDULE-P: INTELLIGENT TRANSPORT SYSTEM 204
1. ON-BOARD DEVICES 204
2. ITS- REQUIREMENTS FOR PUBLIC TRANSPORT VEHICLE OPERATIONS 204
3. PARAMETERS AND DATA STANDARDS 204
4. COMMUNICATION BETWEEN ITS EQUIPMENT AND ITMS CLOUD 204
ON BOARD DEVICES 205
ANNEX – 2 207
ANNEX - 3 208
SCHEDULE-Q : SUBSTITUTION AGREEMENT 209
1.2 INTERPRETATION 210
2 ASSIGNMENT 210

3 SUBSTITUTION OF THE OPERATOR 210

3.2 SUBSTITUTION UPON OCCURRENCE OF FINANCIAL DEFAULT 210
3.3 SUBSTITUTION UPON OCCURRENCE OF OPERATOR DEFAULT 211
3.4 PROCEDURE FOR SUBSTITUTION 211
3.5 SELECTION TO BE BINDING 212

4 PROJECT AGREEMENTS 212

5 TERMINATION OF CONCESSION AGREEMENT 212

5.1 TERMINATION UPON OCCURRENCE OF FINANCIAL DEFAULT 212
5.2 TERMINATION WHEN NO NOMINATED COMPANY IS SELECTED 212
5.3 REALIZATION OF DEBT DUE 213

6 DURATION OF THE AGREEMENT 213

6.1 DURATION OF THE AGREEMENT 213

7 INDEMNITY 213

7.1 GENERAL INDEMNITY 213
7.2 NOTICE AND CONTEST OF CLAIMS 213

8 DISPUTE RESOLUTION 214

8.1 DISPUTE RESOLUTION 214

9 MISCELLANEOUS PROVISIONS 214

9.1 GOVERNING LAW AND JURISDICTION 214
9.2 WAIVER OF SOVEREIGN IMMUNITY 214
9.3 PRIORITY OF AGREEMENTS 214
9.4 ALTERATION OF TERMS 214
9.5 WAIVER 215
9.6 NO THIRD PARTY BENEFICIARIES 215
9.7 SURVIVAL 215
9.8 SEVERABILITY 215
9.9 SUCCESSORS AND ASSIGNS 215
9.10 NOTICES 215
9.11 LANGUAGE 216
9.12 AUTHORISED REPRESENTATIVES 216
9.13 ORIGINAL DOCUMENT 216

SCHEDULE-R : STATEMENT OF VARIATION IN ELECTRICITY COST (ANNUAL) 218

SCHEDULE-S : OPERATIONAL INFRACTIONS 219

SCHEDULE-T : PANEL OF CHARTERED ACCOUNTANTS 226

1 PANEL OF CHARTERED ACCOUNTANTS 226
2 INVITATION FOR EMPANELMENT 226
3 EVALUATION AND SELECTION 226
4 CONSULTATION WITH THE OPERATOR 226
5 MUTUALLY AGREED PANEL 227

SCHEDULE-U : LIQUIDATED DAMAGES PAYABLE BY THE AUTHORITY 228

SCHEDULE-V : LIQUIDATED DAMAGES PAYABLE BY THE OPERATOR 229

SCHEDULE-W: OEM UNDERTAKING 230

SCHEDULE-X : MONTHLY REPORTING FORMAT 232

SCHEDULE-Y : KEY PERFORMANCE INDICATORS- DAMAGES & INCENTIVES 233

SCHEDULE-Z: COMPREHENSIVE MAINTENANCE AGREEMENT 235

1 COMPREHENSIVE MAINTENANCE CONTRACT 235

1.1 MEANING 235
1.2 APPLICABILITY 236
1.3 RESPONSIBILITY OF THE OEM 236

2. CONSIDERATION 236

SCHEDULE AA 239

SCHEDULE AB 282

Part I Preliminary

CONCESSION AGREEMENT

THIS CONCESSION AGREEMENT ("**Agreement**") is entered into on this {the …… day of _____, 20….}[1]

BETWEEN

1 **THE [Metropolitan Transport Corporation (Chennai) Limited** represented by Managing Director, and having its office at Metropolitan Transport Corporation (Chennai) Ltd. No.2, Pallavan Illam, Pallavan Salai, Chennai — 600 002 (hereinafter referred to as the "**Authority**" which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors and assigns) of One **Part**;

AND

2 {****** Limited, a company incorporated under the provisions of the Companies Act, 2013 and having its registered office at, (hereinafter referred to as the "**Operator**", which expression shall, unless repugnant to the context or meaning thereof, include its successors and permitted assigns and substitutes) of the Other **Part**.

The One Part and the Other Party shall be collectively referred to as "the Parties"

WHEREAS:

A. Government of Tamil Nadu (GoTN), through its Finance Department is implementing the Chennai City Partnership (CCP) focusing on the institutional and financial changes that can drive significant improvements in urban service delivery.

B. CCP is being implemented as a Program-for-Results "PforR" operation of the World Bank. The Tamil Nadu Infrastructure Development Board "TNIDB" is designated as the Program Management Unit for the Chennai City Partnership "CCP" program and oversees the implementation of CCP.

C. Under the Disbursement Linked Results agreed under CCP, Metropolitan Transport Corporation (Chennai) Limited (hereinafter referred to as "Authority") is required to enhance its service delivery through various measures including augmentation of the fleet through e-buses under GCC mode.

D. The Authority intends to undertake Procurement, Supply, Operation and Maintenance of 20 Double Decker Electric Buses and Development of Allied Electric and Civil Infrastructure on Gross Cost Contracting.

E. The Authority vide Request for Proposal (RFP) Document dated _____invited bids from eligible entities for Procurement, Supply, Operation and Maintenance of 20 Double Decker Air-Conditioned Electric Buses and Development of Allied Electric and Civil Infrastructure on Gross Cost Contracting (herein after referred to as "the Project"). Based on the qualification requirements, bids were evaluated and those found eligible were shortlisted for evaluation of price proposal.

F. Consequent thereof and after due evaluation of the bids received in response to the

aforesaid RFP Document, the Authority has accepted the proposal submitted by _____*(name of Successful Bidder)* and accordingly issued the Letter of Acceptance (LOA) No. _____dated_____ to___*(name of Successful Bidder)* for the Project.

G. Upon compliance of the terms of the LOA, the Selected Bidder has been designated as the Operator. [Pursuant to the LOA, the Selected Bidder proposed to form a SPV in accordance with the provisions of the RFP, the SPV is incorporated as a private limited company under the Companies Act, 2013 and designated as the Operator].

H. The Operator has also by its letter Ref. No. [-------] dated [ ] represented and confirmed to the Authority that it has been promoted by the Successful Bidder i.e. [name of the Successful Bidder] for the purposes hereof and is held by the said Successful Bidder and joins by its said letter in the request of the said Successful Bidder to Authority to accept the Operator as the entity which shall, inter alia, undertake, fulfill and perform the obligations of the Successful Bidder under the LOA including the obligation to enter into this Concession Agreement for the Project.

I. The Operator has requested the Authority to accept the Operator as the entity which shall undertake inter alia procurement, supply, operation and maintenance of electric buses in Chennai and other obligations of the _____(name of Successful Bidder) including the obligation to enter into this Concession Agreement.

J. The Authority has acceded to the request of the (name of Successful Bidder) and has accordingly agreed to enter into this binding Concession Agreement with the Operator for procurement, supply, operation and maintenance of electric buses under this Project.

K. It is therefore deemed necessary and expedient to enter into this Concession Agreement for, inter alia obligations, the obligation of procurement, supply, operation and maintenance of electric buses and to record the terms, conditions and covenants of the Agreement between the Parties.

L. Amendments were issued to the draft Concession Agreement which was released as a part of RFP document. This Concession Agreement has been amended to reflect the aforesaid changes to bring clarity, and understanding.

M. The Parties have therefore agreed to enter into this Concession Agreement subject to and on the terms and conditions set forth in this Concession Agreement.

N. NOW THEREFORE in consideration of the foregoing and the respective covenants and agreements set forth in this Agreement, the sufficiency and adequacy of which is hereby acknowledged, and intending to be legally bound hereby, the Parties agree as follows:

Article 1 DEFINITIONS AND INTERPRETATION

1.1 Definitions

The words and expressions beginning with capital letters are defined in this Agreement (including those in Article 43) and shall, unless the context otherwise requires, have the meaning ascribed herein, and the words and expressions defined in the Schedules and used therein shall have the meaning ascribed thereto in the Schedules.

1.2 Interpretation

1.2.1 In this Agreement, unless the context otherwise requires,

a. references to any legislation or any provision thereof shall include amendment or re- enactment or consolidation of such legislation or any provision thereof as far as such amendment or re-enactment or consolidation applies or is capable of being applied to any transaction entered into hereunder;

b. references to laws of the State, laws of India or Indian law or regulation having the force of law shall include the laws, acts, ordinances, rules, regulations, bye laws or notifications which have the force of law in the territory of India and as may be amended, modified, supplemented, extended or re-enacted from time to time;

c. references to a "**person**" and words denoting a natural person shall be construed as a reference to any individual, firm, company, corporation, society, trust, government, state or agency of a state or any association or partnership (whether or not having separate legal personality) of two or more of the above and shall include successors and assigns;

d. the table of contents, headings or sub-headings in this Agreement are for convenience of reference only and shall not be used in, and shall not affect, the construction or interpretation of this Agreement;

e. the words "**include**" and "**including**" are to be construed without limitation and shall be deemed to be followed by "**without limitation**" or "**but not limited to**" whether or not they are followed by such phrases;

f. references to "**construction**" or "**building**" include, unless the context otherwise requires; investigation, design, developing, engineering, procurement, delivery, transportation, installation, processing, fabrication, testing, commissioning and other activities incidental to the construction, and "**construct**" or "**build**" shall be construed accordingly;

g. references to "**development**" include, unless the context otherwise requires; construction, renovation, refurbishing, augmentation, upgradation and other activities incidental thereto, and "**develop**" shall be construed accordingly;

h. any reference to any period of time shall mean a reference to that according to Indian Standard Time;

i. any reference to "**hour**" shall mean a period of 60 (sixty) minutes commencing either on the hour or on the half hour of the clock, which by way of illustration means 5.00 (five), 6.00 (six), 7.00 (seven) and so on being hours on the hour of the clock and
5.30 (five thirty), 6.30 (six thirty), 7.30 (seven thirty) and so on being hours on the half hour of the clock;

j. any reference to a day shall mean a reference to a calendar day;

k. reference to a "**business day**" shall be construed as reference to a day (other than a Sunday and public holiday) on which banks in Chennai are generally open for business;

l. any reference to a month shall mean a reference to a calendar month as per the Gregorian calendar;

m. any reference to a "**quarter**" shall mean a reference to the period of 3 (three) months commencing from April 1, July 1, October 1, and January 1, as the case may be;

n. references to any date, period or Project Milestone shall mean and include such date, period or Project Milestone as may be extended pursuant to this Agreement;

o. any reference to any period commencing "**from**" a specified day or date and "**till**" or "**until**" a specified day or date shall include both such days or dates; provided that if the last day of any period computed under this Agreement is not a business day, then the period shall run until the end of the next business day;

p. the words importing singular shall include plural and vice versa;

q. references to any gender shall include the other and the neutral gender;

r. "lakh" means a hundred thousand (100,000) and "crore" means ten million (10,000,000);

s. "indebtedness" shall be construed so as to include any obligation (whether incurred as principal or surety) for the payment or repayment of money, whether present or future, actual or contingent;

t. references to the "winding-up", "dissolution", "insolvency", or "reorganisation" of a company or corporation shall be construed so as to include any equivalent or analogous proceedings under the law of the jurisdiction in which such company or corporation is incorporated or any jurisdiction in which such company or corporation carries on business including the seeking of liquidation, winding-up, reorganisation, dissolution, arrangement, protection or relief of debtors;

u. save and except as otherwise provided in this Agreement, any reference, at any time, to any agreement, deed, instrument, licence or document of any description shall be construed as reference to that agreement, deed, instrument, licence or other document as

amended, varied, supplemented, modified or suspended at the time of such reference; provided that this Sub-clause (u) shall not operate so as to increase liabilities or obligations of the Authority hereunder or pursuant hereto in any manner whatsoever;

v. any agreement, consent, approval, authorisation, notice, communication, information or report required under or pursuant to this Agreement from or by any Party shall be valid and effective only if it is in writing under the hand of a duly authorised representative of such Party in this behalf and not otherwise;

w. the Schedules and Recitals to this Agreement form an integral part of this Agreement and will be in full force and effect as though they were expressly set out in the body of this Agreement;

x. references to Recitals, Articles, Clauses, Sub-clauses, Provisos or Schedules in this Agreement shall, except where the context otherwise requires, mean references to Recitals, Articles, Clauses, Sub-clauses, Provisos and Schedules of or to this Agreement; reference to an Annex shall, subject to anything to the contrary specified therein, be construed as a reference to an Annex to the Schedule in which such reference occurs; and reference to a Paragraph shall, subject to anything to the contrary specified therein, be construed as a reference to a Paragraph of the Schedule or Annex, as the case may be, in which such reference appears;

y. the damages payable by either Party to the other of them, as set forth in this Agreement, whether on per diem basis or otherwise, are mutually agreed genuine pre-estimated loss and damage likely to be suffered and incurred by the Party entitled to receive the same and are not by way of penalty (the “Damages”); and

z. time shall be of the essence in the performance of the Parties’ respective obligations. If any time period specified herein is extended, such extended time shall also be of the essence.

1.2.2 Unless expressly provided otherwise in this Agreement, any Documentation required to be provided or furnished by the Operator to the Authority shall be provided free of cost and in three copies, and if the Authority is required to return any such Documentation with their comments and/or approval, they shall be entitled to retain 2 (two) copies thereof.

1.2.3 The rule of construction, if any, that a contract should be interpreted against the Party responsible for the drafting and preparation thereof, shall not apply.

1.2.4 Any word or expression used in this Agreement shall, unless otherwise defined or construed in this Agreement, bear its ordinary English meaning and, for these purposes, the General Clauses Act, 1897 shall not apply.

1.3 Measurements and arithmetic conventions

All measurements and calculations shall be in the metric system and

calculations done to 2 (two) decimal places, with the third digit of 5 (five) or above being rounded up and below 5 (five) being rounded down; provided that the drawings, engineering dimensions and tolerances may exceed 2 (two) decimal places as required.

1.4 Priority of agreements, clauses and schedules

1.4.1 This Agreement, and all other agreements and documents forming part of or referred to in this Agreement are to be taken as mutually explanatory and, unless otherwise expressly provided elsewhere in this Agreement, the priority of this Agreement and other documents and agreements forming part hereof or referred to herein shall, in the event of any conflict between them, be in the following order:

(a) this Agreement; and

(b) all other agreements and documents forming part hereof or referred to herein, i.e., the Agreement at (a) above shall prevail over the agreements and documents at (b).

1.4.2 Subject to the provisions of Clause 1.4.1, in case of ambiguities or discrepancies within this Agreement, the following shall apply:

(a) between two or more Clauses of this Agreement, the provisions of a specific Clause relevant to the issue under consideration shall prevail over those in other Clauses;

(b) between the Clauses of this Agreement and the Schedules, the Clauses shall
prevail and between Schedules and Annexes, the Schedules shall prevail;

(c) between any two Schedules, the Schedule relevant to the issue shall prevail;

(d) between the written description on the Drawings and the Specifications and Standards, the latter shall prevail;

(e) between the dimension scaled from the Drawing and its specific written dimension, the latter shall prevail; and

(f) between any value written in numerals and that in words, the latter shall prevail.

Part II Scope of the Agreement

Article 2 SCOPE OF THE AGREEMENT

2.1 Scope of the Agreement

The scope of the Agreement (the "**Scope of the Agreement**") shall mean and include, during the Concession Period:

(a) Designing, manufacturing, procurement and supply of the buses conforming to the Specifications and Standards set forth in Schedule-B (the "**Buses**") and in accordance with the provisions of this Agreement;

(b) Operation and Maintenance of Buses in accordance with the provisions of this Agreement;

(c) Equip, Operate and Maintain the Maintenance Depots on the Depot Sites specified in Schedule-A, in accordance with the provisions of this Agreement.

(d) Development, Operation and Maintenance of allied electric and civil infrastructure of the Charging Infrastructure at the Maintenance Depots for charging of the Buses.

Article 3 AWARD OF CONCESSION

3.1 The Concession

3.1.1 Subject to and in accordance with the provisions of this Agreement, Applicable Laws and the Applicable Permits, the Authority hereby awards to the Operator the right to design, manufacture, procure, supply, Operate and Maintain the Buses, Install, Operate and Maintain the Charging Infrastructure and Equip, Operate and Maintain the Maintenance Depots (the "Concession") for a period commencing on and from the Appointed Date and ending on the date (the "Concession Period") falling 12 (twelve) years for bus services after the Scheduled COD, and the Operator hereby accepts the Concession and agrees to implement the same as its obligation subject to and in accordance with the terms and conditions set forth herein.

3.1.2 Subject to and in accordance with the provisions of this Agreement, the Concession hereby granted shall oblige or entitle (as the case may be) the Operator to:

(a) Design, manufacture, procure, and supply the Buses in accordance with Applicable Laws, Applicable Permits, the Specifications and Standards, the Designs and Drawings and the provisions of this Agreement;

(b) Operate and Maintain the Buses in accordance with Applicable Laws, Applicable Permits, Good Industry Practices and the provisions of this Agreement;

(c) Right of Way, access and licence in respect of the Depot Sites for performing its Maintenance Obligations in accordance with the provisions of this Agreement;

(d) Undertake the Fit Out Works and Operate and Maintain the Maintenance Depots in accordance with the provisions of this Agreement;

(e) Install, Operate and Maintain the Charging Infrastructure in accordance with the provisions of this Agreement;

(f) Perform and fulfil all of the Operator's obligations under and in accordance with this Agreement;

(g) Save as otherwise provided in this Agreement, bear and pay all costs, expenses and charges in connection with or incidental to the performance of the obligations of the Operator under this Agreement;

(h) Neither assign, transfer or sublet or create any lien or Encumbrance on this Agreement nor transfer, sub-lease, sub-licence or part possession of the Maintenance Depots and the real estate related thereto including the Depot Site, save and except as expressly permitted by this Agreement;

Article 4 CONDITIONS PRECEDENT

4.1 Conditions Precedent

4.1.1 The Authority and the Operator shall meet the Conditions Precedent as defined in this section after Agreement signing. Save and except as provided in Articles 4, 7, 8, 9, 10, 13.4, 13.6, 16.5, 21, 29, 30, 35, 37, 39 and 42, or unless the context otherwise requires, the respective rights and obligations of the Parties under this Agreement shall be subject to the satisfaction in full of the conditions precedent specified in this Clause 4.1 (the "Conditions Precedent"). Provided, however, that a Party may grant a waiver from satisfaction of any Condition Precedent by the other Party in accordance with the provisions of Clauses 4.1.2 or 4.1.3, as the case may be, and to the extent of such waiver, that Condition Precedent shall be deemed to be fulfilled for the purposes of this Clause 4.1.1.

4.1.2 The Conditions Precedent required to be satisfied by the Authority prior to the Appointed Date shall be deemed to have been fulfilled when the Authority shall have:

(a) handed over to the Operator unencumbered and vacant possession and Right of Way to the one Maintenance Depot that is required to be handed over within 30 days from the date of signing the Agreement or prior to the Appointed Date;

Note: For the purpose of this Clause the list of Maintenance Depot- shall be notified at the time of execution of this Agreement.

(b) procured all Authority Applicable Permits as specified in Schedule-C;

(c) subject to Clause 4.1.3(a), executed the Escrow Agreement;

(d) subject to Clause 4.1.3(b), executed the Substitution Agreement;

(e) if not already provided as on the date of this Agreement, the Authority shall, within 30 (thirty) days from the date of this Agreement, submit the Deployment Plan to the Operator in accordance with Clause 16.5.

Provided that upon request in writing by the Authority, the Operator may, in its discretion, waive any of the Conditions Precedent set forth in this Clause 4.1.2. For the avoidance of doubt, the Operator may, in its sole discretion, grant any waiver hereunder with such conditions as it may deem fit.

4.1.3 The Conditions Precedent required to be satisfied by the Operator shall be deemed to have been fulfilled when the Operator shall have:

(a) executed the Escrow Agreement;

(b) executed the Substitution Agreement;

(c) delivered to the Authority from the Consortium Members, their respective confirmation, in original, of the correctness of their representations and warranties set forth in sub-clauses (k), (l) and (m) of Clause 7.1;

(d) procured all the Operator Applicable Permits specified in Schedule-C required for the procurement of the Buses and the Fit Out Works, unconditionally or if subject to conditions, then, to the extent relevant, comply with all such conditions, such that the Operator Applicable Permits are and shall be kept in full force and effect as may be required under Applicable Laws;

(e) executed the Financing Agreements and delivered to the Authority 3 (three) true copies thereof, duly attested by a Director of the Operator;

(f) delivered to the Authority 3 (three) true copies of the Financial Package and the Financial Model, duly attested by a Director of the Operator, along with 3 (three) soft copies of the Financial Model in MS Excel version or any substitute thereof, which is acceptable to the Senior Lenders; and, if applicable, 3 (three) true copies of the Bus Lease Agreement(s);

(g) complied with its obligations as set out in Clause 13.4;

(h) delivered to the Authority a legal opinion from the legal counsel of the Operator with respect to the authority of the Operator to enter into this Agreement and the enforceability of the provisions thereof;

(i) executed the Product Warranty Undertaking as specified in Schedule-W; and

(j) executed the Comprehensive Maintenance Agreement as specified in Schedule- Z;

(k) The prototype designs shall be submitted within 10 days from the date of signing the agreement. The prototype bus shall be supplied by the operator, within 30 (thirty) days from the date of approval of Designs and Drawings by the authority or prior to the Appointed Date

Provided that upon request in writing by the Operator, the Authority may, in its discretion, waive any of the Conditions Precedent set forth in this Clause 4.1.3. For the avoidance of doubt, the Authority may, in its sole discretion, grant any waiver hereunder with such conditions as it may deem fit.

4.1.4 Each Party shall make all reasonable endeavours to satisfy the Conditions Precedent within 90 days from the date of this Agreement and shall provide the other Party with such reasonable cooperation as may be required to assist that Party in satisfying the Conditions Precedent for which that Party is responsible.

4.1.5 The Parties shall notify each other in writing, at least once a month on the progress made in satisfying the Conditions Precedent and expected date of complying with all Conditions Precedent. Each Party shall promptly inform the other Party when any Condition Precedent for which it is responsible has been satisfied.

4.1.6 The Operator shall, upon satisfaction or waiver, as the case may be, of all the respective Conditions Precedent, notify the Authority of the occurrence

of the Appointed Date.

4.2 Satisfaction of the Conditions Precedent

(a) Unless otherwise specified, the Operator and the Authority shall satisfy or procure the satisfaction of the Conditions Precedent that it is responsible for, within 60 days from the date of this Agreement (the **Scheduled CP Satisfaction Date**).

(b) If any Party fails to satisfy any Condition Precedent that it is required to fulfil by the Scheduled CP Satisfaction Date due to:

(i) a Force Majeure Event;

(ii) a Change in Law;

(iii) in case of the Operator, undue delay by the relevant Government Authority in granting any Operator Applicable Permit, despite the Operator having applied for such Operator Applicable Permit within the specified timelines, on payment of the prescribed fees and having complied with the requirements of Applicable Laws in making such application; or

(iv) delay by the other Party in fulfilling any Condition Precedent required to be satisfied by them or in performing any other obligation under this Agreement, which impacts its ability to satisfy its Conditions Precedent, then the Scheduled CP Satisfaction Date for the affected Party without prejudice to its rights and remedies and subject to Clause 4.3 and 4.4 herein below, shall be extended on a day-for-day basis for the period of such delay.

(c) Each Party shall cooperate and use its reasonable efforts to assist the other Party in satisfying its Conditions Precedent.

4.3 Damages for delay by the Authority

(a) In the event that the Authority does not procure fulfilment or waiver of the Conditions Precedent set forth in Clause 4.1.2 by the Scheduled CP Satisfaction Date (as the same may be extended in accordance with the provisions of Clause 4.2(b) above), or, within the time period specified for the fulfilment of such Condition Precedent, the Authority shall pay to the Operator Damages in an amount calculated at the rate of 0.1% (zero point one per cent) of the Performance Security for each day's delay beyond the Scheduled CP Satisfaction Date until the fulfilment of such Conditions Precedent, subject to a maximum of 20% (twenty per cent) of the Performance Security. If the Authority delays in fulfilling its Conditions Precedent such that the cap on Damages set out herein is breached, then the Authority may continue to pay the Operator Damages in an amount calculated at the rate

of 0.1% (zero point one per cent) of the Performance Security for each additional day's delay and if the Authority fails to pay such Damages, the Operator may, in its sole discretion, terminate the Agreement. Provided that in the event of a delay by the Operator in procuring fulfilment of any of its Conditions Precedent specified in Clause 4.1.3 and where such delay impacts the Authority's ability to fulfil any of its Conditions Precedents, no Damages shall be due or payable by the Authority under this Clause 4.3 until the date on which the Operator shall have procured fulfilment of the relevant Conditions Precedent specified in Clause 4.1.3.

(b) Upon termination of this Agreement pursuant to Clause 4.3 (a), the Authority shall return the Performance Security submitted by the Operator subject to the Operator having paid in full any amounts due and payable by it to the Authority as on the date of termination.

4.4 Damages for delay by the Operator

(a) In the event that (i) the Operator does not procure fulfilment or waiver of any or all of the Conditions Precedent set forth in Clause 4.1.3 by the Scheduled CP Satisfaction Date (as the same may be extended in accordance with the provisions of Clause 4.2 (b)), or, within the time period specified for the fulfilment of such Condition Precedent, the Operator shall pay to the Authority Damages in an amount calculated at the rate of 0.1% (zero point one per cent) of the Performance Security for each day's delay until the fulfilment of such Conditions Precedent, subject to a maximum of 20% (twenty percent) of the Performance Security, and upon reaching such maximum, the Authority may, in its sole discretion and subject to the provisions of Clause 9.2, terminate the Agreement. Provided that in the event of delay by the Authority in procuring fulfilment of the Condition Precedent specified in Clause 4.1.2 and where such delay impacts the Operator's ability to fulfil any of its Conditions Precedents, no Damages shall be due or payable by the Operator under this Clause 4.4 until the date on which the Authority shall have procured fulfilment of the relevant Conditions Precedent specified in Clause 4.1.2.

(b) Upon termination of this Agreement pursuant to Clause 4.4 (a), the Authority shall encash the Performance Security submitted by the Operator.

4.5 Deemed Termination upon delay

Without prejudice to the provisions of Clauses 4.2, 4.3 and 4.4 and subject to the provisions of Clause 9.2, the Parties expressly agree that in the event the Appointed Date does not occur, for any reason whatsoever, within 400 (four hundred) days of the date of this Agreement or any other mutually

extended period agreed by the Parties, all rights, privileges, claims and entitlements of the Operator under or arising out of this Agreement shall be deemed to have been waived by, and to have ceased with the concurrence of the Operator, and the Agreement shall be deemed to have been terminated by mutual agreement of the Parties. Provided, however, that in the event the delay in occurrence of the Appointed Date is on account of the Authority failing to fulfil its Conditions Precedent, the Authority shall return the Performance Security submitted by the Operator subject to the Operator having paid in full any amounts due and payable by it to the Authority as on the date of termination. Further, in the event the delay in occurrence of the Appointed Date is on account of the Operator failing to fulfil its Conditions Precedent, the Authority shall encash the Performance Security submitted by the Operator.

Article 5 OBLIGATIONS OF THE OPERATOR

5.1 Obligations of the Operator

5.1.1 The Operator shall procure the Buses as per the Delivery Schedule provided in Schedule- G hereto for providing the Services in accordance with the Deployment Plan and in accordance with the terms and conditions of this Agreement.

5.1.2 Without affecting the generality of the provisions contained in Clause 5.1.1 above, the Operator shall procure at its cost and expense, all Operator Applicable Permits from Government Instrumentalities including but not limited to the certificate of registration, certification of fitness from the relevant Regional Transport Office (RTO) having jurisdiction over the Project for all Buses and shall Operate and Maintain the Buses in accordance with the terms and conditions of this Agreement.

5.1.3 Subject to and on the terms and conditions of this Agreement, the Operator shall, at its own cost and expense, undertake the Fit Out Works and Operation and Maintenance of the Maintenance Depots for the maintenance of Buses and shall observe, fulfil, comply with and perform all its obligations set out in this Agreement or arising hereunder.

5.1.4 Subject to and on the terms and conditions of this Agreement, the Operator shall, at its own cost and expense, undertake the design, engineering, procurement, installation and Operation and Maintenance of the Charging Infrastructure and shall observe, fulfil, comply with and perform all its obligations set out in this Agreement or arising hereunder.

5.1.5 Power supply at 415 V only up to pillar of LT distribution transformer(s) shall be made available by the Authority (“Point of Supply), the remaining power infrastructure upto the chargers will fall under the scope of Operator. The Operator shall procure, install, operate and maintain adequate metering equipment for the Charging Infrastructure to accurately record throughout the term of this Agreement the electricity consumed for charging the Buses.

5.1.6 The Operator shall comply with all Applicable Laws and Applicable Permits (including renewals as required) in the performance of its obligations under this Agreement.

5.1.7 The Operator shall ensure that they have a minimum of 1 no. of Maintenance Vehicle (“Break Van”) for each lot of 20 (twenty) Buses. This Break Van should be available at the Depot for servicing or towing any Bus that has a breakdown during normal course of operations.

5.1.8 The Operator shall maintain minimum *2 (two) number of buses in case of 20 buses allocation* of additional Bus/Buses as spare to ensure 100% availability of Fleet from the date of Lot COD of each Lot as per the Delivery Schedule.

5.1.9 Save and except as otherwise provided in this Agreement or Applicable Laws, as the case may be, the Operator shall, in discharge of all its obligations under this Agreement, conform with and adhere to Good Industry

Practice.

5.1.10 Operator shall have the right to prepare and monetize the carbon assets generated if any. This means that it shall have the right to register the project under any scheme launched by the Government of India in this regard and/ or voluntary market registries. The monetization of any carbon assets from the operations of the Buses and any carbon credits generated from bus operations during the Concession Period shall be attributable solely to the Operator.

5.1.11 The Operator shall, at its own cost and expense, in addition to and not in derogation of its obligations elsewhere set out in this Agreement:

(a) make, or cause to be made, necessary applications to the relevant Government Instrumentalities with such particulars and details as may be required for obtaining the Operator Applicable Permits and any other Applicable Permits other than the Authority Applicable Permits, and obtain and keep in force and effect such Applicable Permits in conformity with Applicable Laws;

(b) make, or cause to be made, necessary applications to the relevant Government Instrumentalities with such particulars and details as may be required for obtaining renewals or extensions of any Authority Applicable Permits after the Appointed Date;

(c) procure, as required, the appropriate proprietary rights, licenses, agreements and permissions for materials, methods, processes, know-how and systems used or incorporated into the Buses, Maintenance Depot and Charging Infrastructure;

(d) perform and fulfil its obligations under the Financing Agreements;

(e) make reasonable efforts to maintain harmony and good industrial relations among the personnel employed by it or its Contractors in connection with the performance of its obligations under this Agreement;

(f) ensure that its Contractors comply with all Operator Applicable Permits and Applicable Laws and Good Industry Practices in the performance by them of any of the Operator's obligations under this Agreement;

(g) bear and pay for all electricity consumed for the purposes of performing the Operator's obligations or exercising its rights under this Agreement, including without limitation, all electricity required for, or in relation to the Fit Out Works, Operation and Maintenance of the Maintenance Depot (including the Charging Infrastructure) and Operation & Maintenance of the Buses (which, for the avoidance of doubt includes any electricity required for charging the Buses), provided that the Operator may claim from the Authority such amounts towards reimbursement of such electricity cost pursuant to Clause 22.5;

(h) always act in a manner consistent with the provisions of this Agreement and not omit or cause or fail to do any act, deed or thing, whether intentionally or otherwise, which may in any manner be violative of any of the provisions of this Agreement;

(i) ensure that Users are treated with due courtesy and provided with ready access to services and information;

(j) support, cooperate with and facilitate the Authority in the implementation and operation of the Project in accordance with the provisions of this Agreement;

(k) take all reasonable precautions for the prevention of accidents on or around the Maintenance Depot and provide all reasonable assistance and emergency medical aid to accident victims; and

(l) vacate and handover peaceful possession of the Maintenance Depot to the Authority upon Termination of this Agreement or expiry of the Concession Period, in accordance with the provisions of this Agreement.

5.1.12 The operator should comply with all the obligations of the POSH Act, 2013 including constituting an internal complaints committee.

5.1.13 The operator should adopt SOPs to handle complaints of sexual harassment received from commuters and addressed in accordance with the POSH Act, 2013. Ensure that the staff are regularly trained on the Grievance Mechanism of the POSH Act, 2013.

5.1.14 This activity is associated to a Program supported by financing from the World Bank and Bidders/Suppliers/Contractors/Consultants are required to comply with the applicable Guidelines (available at the following link): https://ppfdocuments.azureedge.net/3682.pdf

5.1.15 The Operator shall ensure that provisions are made for safety of women at Maintenance Depot, including sufficient lighting, street lighting, and visibility. The Operator shall also ensure that separate washrooms are provided for women at the Maintenance Depot.

5.2 Obligations relating to Project Agreements

5.2.1 It is expressly agreed that the Operator shall, at all times, be responsible and liable for all its obligations under this Agreement notwithstanding anything contained in any other Project Agreements or any other agreement, and no default under any other Project Agreement or agreement shall excuse the Operator from its obligations or liability hereunder.

5.2.2 The Operator shall submit to the Authority the drafts of all Project Agreements (to which the Authority is not a party) or any amendments or replacements thereto for its review and comments, and the Authority shall have the right but not the obligation to undertake such review and provide its comments, if any, to the Operator within 15 (fifteen) days of the receipt of such drafts. Within 7 (seven) days of execution of any Project Agreement

or amendment thereto, the Operator shall submit to the Authority a true copy thereof, duly attested by a Director or any person authorised by the Board of Directors of the Operator, for its record. For the avoidance of doubt, it is agreed that the review and comments hereunder shall be limited to ensuring compliance with the terms of this Agreement. It is further agreed that any failure or omission of the Authority to review and/ or comment hereunder shall not be construed or deemed as acceptance of any such agreement or document by the Authority. No review and/or observation of the Authority and/or its failure to review and/or convey its observations on any document shall relieve the Operator of its obligations and liabilities under this Agreement in any manner nor shall the Authority be liable for the same in any manner whatsoever.

5.2.3 The Operator shall not make any addition, replacement or amendments to any of the "**Financing Agreements**" without the prior written consent of the Authority if such addition, replacement or amendment has, or may have, the effect of increasing the Total Project Cost, and in the event that any replacement or amendment is made without such consent, the Operator shall not enforce such replacement or amendment nor permit enforcement thereof against the Authority. For the avoidance of doubt, and subject to this Clause 5.2.3, no prior consent of the Authority shall be required for restructuring or rescheduling of the debt of the Operator provided such restructuring or rescheduling does not result in an increase in the Total Project Cost.

5.2.4 Notwithstanding anything to the contrary contained in this Agreement, the Operator shall not sub-lease, sub-license, assign or in any manner create an Encumbrance on the Depot Sites.

5.2.5 The Operator shall ensure that each of the Project Agreements contains provisions that entitle the Authority to step into such agreement, in its sole discretion, in substitution of the Operator in the event of Termination or Suspension (the "**Covenant**"). For the avoidance of doubt, it is expressly agreed that in the event the Authority does not exercise such rights of substitution within a period not exceeding 90 (ninety) days from the Transfer Date, the Project Agreements shall be deemed to cease to be in force and effect from the Transfer Date without any liability whatsoever on the Authority and the Covenant shall expressly provide for such eventuality subject to the Operator issuing a notice of reminder to the Authority at least 15 (fifteen) days prior to the expiry of the aforesaid 90 (ninety) day period. The Operator expressly agrees to include the Covenant in all its Project Agreements and undertakes that it shall, in respect of each of the Project Agreements, procure and deliver to the Authority an acknowledgment and undertaking, in a form acceptable to the Authority, from the counter party(ies) of each of the Project Agreements, where under such counter party(ies) shall acknowledge and accept the Covenant and undertake to be bound by the same and not to seek any relief or remedy whatsoever from the Authority in the event of Termination or Suspension.

5.2.6 Notwithstanding anything to the contrary contained in this Agreement, the Operator agrees and acknowledges that selection or replacement of an O&M Contractor and execution of the O&M Contract shall be subject to the prior approval of the Authority from national security and public interest perspective. The decision of the Authority in this behalf shall be final, conclusive and binding on the Operator, and therefore the Operator undertakes that it shall not give effect to any such selection or contract without prior approval of the Authority. Provided however, that this Clause 5.2.6 shall not apply to any subcontracts entered into by the Operator for the provision of any housekeeping or basic office support staff services. For the avoidance of doubt, it is expressly agreed that approval of the Authority under this Clause 5.2.6 shall be limited to national security and public interest perspective, and the Authority shall endeavor to convey its decision thereon expeditiously. It is also agreed that the Authority shall not be liable in any manner on account of grant or otherwise of such approval and that such approval or denial thereof shall not in any manner absolve the Operator or its Contractors from any liability or obligation under this Agreement.

5.2.7 OEM Undertaking to the Authority

In case of Termination of the Agreement, the OEM warranties product restoration to ensure continuous operation of Buses and other infrastructure provided by the Operator under this Agreement. The OEM Undertaking to be executed by the OEM is at Schedule W. In addition to the OEM Undertaking, OEM also agrees to execute Comprehensive Maintenance Contract as specified in Schedule Z.

For the purpose of clarity, it is mentioned that a specific distinction between OEM and its Associate/Parent is specifically made. The Agreements referred herein shall be signed by OEM.

5.3 Obligations relating to Change in Ownership

5.3.1 The Operator shall not undertake or permit any Change in Ownership, except with the prior written approval of the Authority.

5.3.2 Notwithstanding anything to the contrary contained in this Agreement, the Operator agrees and acknowledges that:

(a) all acquisitions of Equity by an acquirer, either by himself or with any person acting in concert, directly or indirectly, including by transfer of the direct or indirect legal or beneficial ownership or control of any Equity, in aggregate 25% (twenty five per cent) or more of the total Equity of the Operator; or

(b) acquisition of any control directly or indirectly of the Board of Directors of the Operator by any person either by himself or together with any person or persons acting in concert with him,

shall constitute a Change in Ownership requiring prior approval of the Authority from national security and public interest perspective. The decision of the Authority in this behalf shall be final, conclusive and binding on the Operator, and therefore the Operator undertakes that it shall not give effect to

any such acquisition of Equity or control of the Board of Directors of the Operator without such prior approval of the Authority. For the avoidance of doubt, it is expressly agreed that approval of the Authority pursuant to this Clause 5.3.2 hereunder shall be limited to a national security and public interest perspective, and the Authority shall endeavour to convey its decision thereon expeditiously. It is also agreed that the Authority shall not be liable in any manner on account of grant or otherwise of such approval and that such approval or denial thereof shall not in any manner absolve the Operator from any liability or obligation under this Agreement. It is further agreed that in the event of any acquisition of shares or control in the Selected Bidder (or Lead Member in case of a consortium) or its holding company by another entity, which results in a Change in Ownership as set forth in this Clause 5.3.2, the Operator shall inform the Authority of such occurrence within 15 (fifteen) days thereof and seek consent of the Authority under and in accordance with the provisions of this Clause 5.3.2. In the event the Authority denies its consent to such Change in Ownership, a Change in Ownership shall be deemed to have occurred in breach of this Clause 5.3.2.

For the purposes of this Clause 5.3.2:

(i) the expression "acquirer", "control" and "person acting in concert" shall have the meaning ascribed thereto in the Securities and Exchange Board of India (Substantial Acquisition of Shares and Takeover) Regulations, 2011 or any statutory re-enactment thereof as in force as on the date of acquisition of Equity, or the control of the Board of Directors, as the case may be, of the Operator;

(ii) the indirect transfer or control of legal or beneficial ownership of Equity shall mean transfer of the direct or indirect beneficial ownership or control of any company or companies whether in India or abroad which results in the acquirer acquiring control over the shares or voting rights of shares of the Operator; and

(iii) power to appoint, whether by contract or by virtue of control or acquisition of shares of any company holding directly or through one or more companies (whether situate in India or abroad) the Equity of the Operator, not less than half of the directors on the Board of Directors of the Operator or of any company, directly or indirectly whether situate in India or abroad, having ultimate control of 25% (twenty five per cent) or more of the Equity of the Operator shall constitute acquisition of control, directly or indirectly, of the Board of Directors of the Operator.

5.4 Obligations relating to employment of foreign nationals

The Operator acknowledges, agrees and undertakes that employment of foreign personnel by the Operator and/or its Contractors and their sub-contractors shall be subject to grant of requisite regulatory permits and approvals including employment/residential visas and work permits, if any required, and the obligation to apply for and obtain the same shall and will

always be of the Operator and, notwithstanding anything to the contrary contained in this Agreement, refusal of or inability to obtain any such permits and approvals by the Operator or any of its Contractors or sub-contractors shall not constitute Force Majeure Event, and shall not in any manner excuse the Operator from the performance and discharge of its obligations and liabilities under this Agreement. Provided that, the Authority shall provide reasonable assistance to the Operator, if required and requested for in written , in relation to applying for any employment/residential visas and work permits in accordance with Clause 6.1.2(l).

5.5 Obligations relating to employment of personnel

5.5.1 The Operator shall ensure that the personnel engaged by it in the performance of its obligations under this Agreement are at all times properly trained for their respective functions.

5.5.2 The Operator shall, notwithstanding its obligations contained herein for employment and training of staff, undertake capacity building training and workshops for the Operations and Maintenance of the Buses and Maintenance Depot and other infrastructure, as may be directed by the Authority. Operator shall develop and provide trainings on workers' code of conduct, which sets out the standard of behavior for employees of the Operator to follow.

5.5.3 The Operator shall ensure that the personnel engaged by it in the performance of its obligations under this Contract are at all times properly trained and possess the requisite skill and qualifications as per Good Industry Practice and Applicable Laws for undertaking their respective functions under this agreement.

5.5.4 The Operator shall observe Equal Opportunity employment practices. The operator shall foster gender diversity and adequate representation of women trainees & women trainers and other socially disadvantaged groups. The operator shall make efforts to recruit and train women drivers. The Operator shall submit an annual statement to the Authority in this regard showing the positive actions taken to encourage employment of women, specially-abled and other socially disadvantaged groups and results thereof duly classified by gender, disability and other social disadvantage. Operator shall ensure that Sexual Harassment laws at the Workplace Policy and Equal Opportunities Policy are in place as per the requirement of POSH Act, 2013 and Rights of Persons with Disabilities Act, 2016 ("**PwD Act**"). Operator shall designate a grievance redressal officer to address any complaints related to workplace discrimination as per the PwD Act

5.5.5 Prior to engaging any driver for operating the Buses, the Operator shall ensure that each such driver receives a combination of classroom instruction and behind-the-wheel instruction as specified in Article 16.3.2, sufficient to enable each driver to operate the Bus in a safe and efficient manner in terms of this Agreement.

5.5.6 The operator shall ensure the trainings of the entire workforce on a yearly

basis on gender differences in accessing mobility, gender sensitivity, sexual harassment and women's safety. Training should also be provided for conductors and drivers to understand the problems highlighted by women passengers and address them during travel. A code of conduct for drivers and conductors shall be created and training imparted.

5.5.7 The Authority may require the Operator to immediately remove any staff member/ personnel employed by the Operator for the purpose of the Project, who in the opinion of the Authority:

(a) persists in any misconduct including sexual harassment of colleagues or passengers;
(b) is incompetent or negligent in the performance of his duties;
(c) fails to conform with any provisions of this Agreement; or
(d) persists in any conduct which is prejudicial to the safety and security of the passengers and general public,

5.5.8 in each case, subject to provision of reasonable evidence. The decision of the Authority in its opinion under this Clause to remove any staff member/ personnel employed by the Operator shall be final and binding on the Operator and that the Operator shall take immediate steps to remove such staff member/ personnel. Nothing under this Clause shall excuse the Operator from its obligations or liability under this Agreement for the purposes of implementing the Project.

5.5.9 The Operator shall be solely and exclusively responsible for all drivers, employees, workforce, personnel and staff employed or contracted for the purposes of implementing the Project. The Operator shall ensure that all personnel and staff are under its continued supervision to (i) provide Bus Service in a safe and efficient manner to the public; and (ii) carry out all other obligations of the Operator as set out in this Agreement. Provided however the Authority shall not be liable for payment of any sum or give compensation for any claim (including but not limited to compensation on account of death/ injury/ termination) of such nature to such foregoing personnel and staff of the Operator at any point of time during the Concession Period or thereafter; the Operator undertakes to hold harmless and keep the Authority indemnified in this regard for any claim for payment raised by such foregoing persons or any third party.

5.5.10 The Operator shall ensure that all drivers, personnel and staff wear uniforms as approved by the Authority. The Operator shall at its own cost and expense, provide uniforms and shall ensure that drivers and any other personnel and staff employed by it shall, at all times, wear clean uniforms while on duty or doing any act in relation to the Project. The operator to ensure culturally appropriate uniform is provided to women staff.

5.5.11 The Operator shall be responsible for all the costs and expenses for employment of drivers and other personnel including but not limited to expenses for travel, training of its employees, and payment to vendors engaged by the Operator in connection with the implementation of this Project.

5.5.12 The Operator shall make efforts to maintain harmony and good industrial relations among the labour and personnel employed in connection with the performance of the Operator's obligations under this Agreement by exercising appropriate supervision and control. The Operator shall be responsible for employing any and all competent manpower, personnel, labour, etc., as may be required to be deployed by it for implementation of the Project and as such the Operator on an exclusive basis shall be responsible for exercising supervision and control over such manpower, personnel, labour, etc. For all intents and purposes under this Contract, the Operator alone shall be the principal employer in terms of the provisions of the Factories Act, 1948 and the Contract Labour (Regulation and Abolition) Act, 1970 in respect of such manpower, personnel, labour, etc. The Authority shall at no point of time be concerned in any manner whatsoever with any employee or labour related issues of such manpower, personnel, labour, etc. of the Operator and shall not have any liability or responsibility towards them. The Operator shall keep the Authority indemnified for all claims that may arise due to Operator's non-compliance with any provisions of this Clause

5.5.11. The Operator shall redress specific grievances of women staff in accordance with the Grievance Mechanism.

5.6 Advertisement and Branding of Buses

The Buses or any part thereof shall not be branded in any manner to advertise, display or reflect the name or identity of the Operator or its shareholders, save to the extent as provided in Clause 16.7. Provided that, the Operator may affix the brand logo, make and model of the Bus at the front and rear end of the Bus. The Operator undertakes that it shall not, in any manner, use the name or identity of its shareholders to advertise or display its own identity, brand equity or business interests, including those of its shareholders, save and except as may be necessary in the normal course of business. For the avoidance of doubt, it is agreed that the Operator may, at every Maintenance Depot, display its own name at a spot where other public notices are displayed for the Users.

5.7 Obligations regarding risk of loss or damage

5.7.1 The Operator shall bear the risk of loss in relation to each Bus for the performance of its Operation and Maintenance obligations hereunder.

5.7.2 Notwithstanding the Operator's obligations under Article 37, the Operator shall take or cause to be taken all steps necessary under Applicable Laws to protect the Authority against claims by other parties with respect thereto in accordance with the terms and provisions of this Agreement.

5.8 Obligations relating to information

5.8.1 Without prejudice to the provisions of Applicable Laws and this Agreement, upon receiving a notice from the Authority for any information that it may reasonably require or that it considers to be necessary to enable it to

perform any of its functions, the Operator shall provide such information to the Authority forthwith and in the manner and form required by the Authority.

5.8.2 After receiving a notice from the Authority for reasoned comments on the accuracy and text of any information relating to the Operator's activities under or pursuant to this Agreement which the Authority proposes to publish, the Operator shall provide such comments to the Authority in the manner and form required by the Authority.

5.9 Obligations relating to aesthetic quality

The Operator shall maintain a high standard in the appearance and aesthetic quality of the Buses, the Maintenance Depot and the Project as a whole and achieve integration of the Buses, Maintenance Depot and Charging Infrastructure with the character of the surrounding landscape through both appropriate design and sensitive management of all visible elements. The operator shall ensure that aesthetic design of Buses, the installations carried out by the Operator in the Maintenance Depot are as per Good Industry Practice and design standards and are gender neutral and disabled-friendly for persons with disability.

5.10 Obligations relating to noise control

The Operator shall take all such measures as may be necessary in accordance with Applicable Laws and Good Industry Practice to control and mitigate the noise arising from the Buses and the Maintenance Depot and its impact on the Users and the surrounding neighbourhood.

5.11 Facilities for physically challenged and elderly persons

The Operator shall, in conformity with the guidelines issued from time to time by the Ministry of Social Justice and Empowerment, or a substitute thereof, procure a barrier free environment for the physically or visually challenged, women, pregnant women, children and for elderly persons using the buses and for the staffs/users of the Bus Maintenance Depot. To the extent that Good Industry Practices require the implementation of higher standards than those set out by the Ministry of Social Justice and Empowerment, or a substitute thereof, the Operator shall adhere to such higher standards. Some of the relevant guidelines and standards include- Code of Practice for Bus Body Design and Approval [AIS-052 (Rev 1) & Amendments. 1 to 9.

5.12 Obligations relating to Charging Infrastructure

The Operator agrees that it shall procure, construct, install and provide the Charging Infrastructure at the Maintenance Depot which is capable of Overnight Charging for the buses and opportunity charging of Buses at mutually identified locations (Maintenance depot, Terminal, etc.,) in accordance with the Deployment Plan. The Operator agrees that it shall ensure that the Charging Infrastructure are used only for the purpose of charging of Buses and no other purpose whatsoever.

5.13 Obligations relating to appointment of Drivers and Staff

a. The Operator shall provide a driver with valid driving license issued by the competent authorities under the Applicable Laws, including Motor vehicles Act, 1988 having experience of 2 years to drive transport vehicles including Buses of the kind defined herein and valid passenger service badge, age within 24 to 60 years.
b. The Operator shall appoint drivers for operating the buses by taking into Police verification of individual candidate.
c. The Operator or its sub-contractor shall have to make payment to the driver's bank account through RTGS/NEFT mode only.
d. The driver while on duty should have valid identity cards as required under M.V. Act/Rules (Motor Vehicle Act and Rules).
e. The driver along with vehicle should report for duty in a neat and clean uniform prescribed by Authority, at the assigned depot and at the assigned time. Similarly other staff members employed by the operator should use uniform prescribed by Authority.
f. The Operator shall provide the list of all employees with their residential addresses, mobile nos. to the Authority.
g. The Operator shall not employ category of persons as drivers for operating of Buses who were employed on any other bus service and were replaced by the owner/co- owner on a complaint made against him by the Authority.
h. The Operator shall ensure that no employee working with him at the same time works on the roll of Authority or any other organization.
i. A driver employed by the Operator shall undergo the medical fitness examination by medical officer of Authority at appropriate cost or any other reputed hospital / medical institution from the City and he/she will be permitted to ply the vehicles only if he/she is fit for the job of driver to drive the Buses as mentioned herein.
j. The Operator shall not deploy any drivers which have been blacklisted from operation of a heavy commercial vehicle and or a transport vehicle and such drivers should not have any pending cases related to fatal accidents or traffic fines due or have his license suspended at any time during the last 3 years preceding the date of execution of the Agreement; Further, in case of appointment/deployment of any drivers during the Concession Period after the initial deployment of the drivers the aforesaid shall apply to such deployment, mutatis mutandis during the last 3 years preceding the date of such appointment/deployment.
k. However, Authority may require the Operator to remove any person employed by it for the Bus Services, who in the opinion of Authority:
    i Persists in any misconduct,
    ii Is incompetent or negligent in the performance of his/her duties,
    iii Fails to conform with any provisions of the Tender/Agreement, or
    iv Persists in any conduct which is prejudicial to safety, health, or

the protection of the general public/ environment.

v Is a person convicted by a competent court of law.

vi Is a person who is involved in any fatal accident.

l. Operator be solely and exclusively responsible for all drivers, employees, workmen, personnel and staff employed for the purposes of implementing the Agreement.

m. The Operator shall ensure that all personnel and staff are under its supervision so as to provide the Bus Service in a safe and efficient manner to the public.

n. Provided, however Authority shall not be liable for any payment or claim or compensation (including but not limited to compensation on account of death/injury/termination) of any nature to such foregoing persons at any point of time during tenure of this Agreement or thereafter and the operator shall keep Authority indemnified in this regard.

o. Ensure that all drivers, personnel and staff are well behaved with passengers.

p. The Operator shall at its own cost and expense provide uniforms and shall ensure that clean uniforms are worn by drivers and any other personnel and staff employed at all times when they are on duty and doing any act in relation to providing the Bus Service under the Agreement.

q. The Operator shall be responsible for all the costs and expenses of maintenance, operation, employment of drivers and other personnel including but not limited to travel, training of its employees, and vendors engaged by the Operator in connection with the implementation of the Agreement.

r. The Operator shall make efforts to maintain harmony and good industrial relations among the labor and personnel employed in connection with the performance of the Operator's obligations under this Agreement and shall at all times be the principal authority in respect of such labor and personnel.

s. The Operator and their employees will not be held eligible for facility of free travel on the Buses herein or any other bus belonging to Authority and they will have to abide by the rules as are applicable to the other members of the public including payment.

5.14 Obligations of the Operator under Labour codes and Rules

5.14.1 The Operator shall comply with the provisions of all applicable Labour Codes, including, but not limited to the Motor Transport Workers Act, 1961, the Minimum Wages Act, 1948, the Payment of Wages Act, 1936, the Employee's Compensation Act, 1923 and any amendments to the aforementioned Acts and any Draft Rules made there under, as modified from time-to-time.

While certain recent Labour Codes, such as the Code on Wages, 2019, The Industrial Relations Code 2020, Code on the Social Security 2020, and The Occupational Safety, Health and Working Conditions 2020, have been

enacted, their implementation timelines may vary. The Operator shall be responsible for complying with all applicable Labour Codes, including those that are currently in effect or come into effect during the contract period.

Additionally, the Operator shall indemnify the Authority from and against any claims arising from non- compliance with the aforementioned Labour Codes and their associated Rules.

5.14.2 In respect of all labour directly or indirectly employed in the contract for the performance of the Agreement, the Operator shall comply with or cause to comply with the provisions of the aforesaid Labour codes and the Rules wherever applicable.

5.14.3 The Operator shall pay the wages as per the Minimum wages, notified by the concerned Labour department of the State as notified by the State Government, through the bank transfer.

5.14.4 The Operator should also ensure statutory compliance in regard to its employed workforce including but not limited to the following:

i. Compliance of minimum wages Act by payment of wage on 7th of every month through Bank
ii. Compliance of provision of ESI Act, EPF Act, Bonus Act and Employees Compensation Act, ESI registration
iii. Ensure treatment in ESI hospital in case of accident/injuries suffered in performance of work and compensation under ESI Act.
iv. Send Accident report to Regional Labour Commissioner (RLC) & ESI authorities.
v. Observance of working hours, weekly rest and overtime payments as per minimum wages Act-1948.
vi. PF Registration issued by the Regional Provident Fund Commissioner/ Competent Authority
vii. Annual submission of PF compliance certificate duly certified by a CA

5.15 Obligation of the Operator for Environment Social Health and Safety (EHS)
The operator during the term of this agreement shall adhere to all the environmental and social compliances/ Obligations as mentioned in the Environment Social Health and Safety (EHS) requirements provided under Schedule AB.

Article 6 OBLIGATIONS OF THE AUTHORITY

6.1 Obligations of the Authority

6.1.1 The Authority shall, at its own cost and expense undertake, comply with and perform all its obligations set out in this Agreement or arising hereunder. The Authority should comply with all the obligations of the POSH Act including constituting an internal complaints committee. The Authority should ensure the formation of an ICC at the operator level. The Authority should ensure that the operator adopts the SOPs on complaints of sexual harassment received from the commuters and addressed in accordance with the POSH Act.

6.1.2 The Authority agrees to provide support to the Operator and undertakes to observe, comply with and perform, subject to and in accordance with the provisions of this Agreement and Applicable Laws, the following:

(a) as a part of the Deployment Plan, provide the Operational Routes to be undertaken by the Operator as detailed in Clause 16.4 herein and in accordance with the Deployment Plan;

(b) subject to and on the terms and conditions of this Agreement, the Authority shall handover peaceful and unencumbered possession of Maintenance Depot, which meet the Minimum Maintenance Depot Specifications, to the Operator in accordance with the timelines set out in Clause 10.2.5;

(c) provide the Operator with adequate Right of Way and license to use the Maintenance Depot in accordance with the provisions of this Agreement;

(d) at its own cost and expense, provide, or cause to be provided, road connectivity (sufficient for the movement of the Buses and other vehicles and machinery required for the Operation and Maintenance of the Maintenance Depot) to the nearest motorable road, at any location at the boundary of the Maintenance Depot in accordance with Clause 12.1;

(e) procure and provide to the Operator, electricity connections (at the available HT metering level, which for the avoidance of doubt may be a 11/22/33/66 kV connection) and power supply at 415 V only upto pillar of LT distribution transformer(s) at Maintenance Depots specified in Schedule-A for charging of the Buses and operation of the Charging Infrastructure, along with all requisite permissions, approvals and licenses in relation to the utilisation by the Operator of such electricity connection. The maintenance of the electricity connections transformer up to 415 V at the locations of the Maintenance Depot shall be in the scope of Authority;

(f) bear the cost of additional electricity charges payable in relation to the charging of the Buses in accordance with Clause 22.5;

(g) procure and provide access and connections, at its cost, to municipal water and sewage disposal utilities for the Maintenance

Depot, provided that the Operator shall remain liable to pay any regular bills raised by the relevant Government Instrumentality for the use of such utilities;

(h) upon written request from the Operator, and subject to the Operator complying with Applicable Laws, provide all reasonable support and assistance to the Operator in procuring the Operator Applicable Permits;

(i) not do or omit to do any act, deed or thing which may in any manner be violative of any of the provisions of this Agreement;

(j) support, cooperate with and facilitate the Operator in the implementation and operation of the Project in accordance with the provisions of this Agreement;

(k) upon written request from the Operator and subject to the provisions of Clause 5.4, provide reasonable assistance to the Operator and any expatriate personnel of the Operator or its Contractors to obtain applicable visas and work permits for the purposes of discharge by the Operator or its Contractors their obligations under this Agreement.;

(l) The Authority shall bear passenger tax from revenue collection and/or from applicable passenger taxes levied by State Transport Authorities from operations in jurisdictions outside the registered state for interstate operations. Additionally, the Authority shall also bear the cost of tolls from operations of buses as per the deployment schedule. The above-mentioned costs shall be reimbursed to the operator by the Authority on submission of actual receipts by the Operator.

(m) Collection of fares and shall also bear the associated costs for such activity.

6.1.3 The following minimum depot infrastructure shall be provided by Authority:

a) Adequate parking area (approx. 100 sq.m. per bus) for parking of buses allocated to the depot and additional space for parking the spare buses deployed by the Operator.

b) Concretized or blacktopped depot pavement/ yard flooring/ Bus Parking area

c) Workshop shed with Bus maintenance/ service pits (minimum one) to accommodate Double Decker ebus

d) Spaces /shed for spare parts store, material store and tyre store

e) Bus washing bay/platform

f) Administrative block (with spaces for offices, control room and simulator room)

g) Staff amenities including driver's rest room with toilets and bathrooms, canteen space and first aid room

h) Boundary demarcation clearly segregating Maintenance Depot premise from other activities/ neighboring properties

i) Security cabin

j) Lighting for all facilities within the Maintenance Depot including Maintenance Depot yard lighting for bus parking area

k) Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB) or respective local body water supply connection.

l) Maintenance Depot water supply system with appropriate storage.

m) Effluent Treatment Plant with treated water network for reuse

n) Fire Hydrant/ Fire Fighting system

o) Proper drainage system at the depot to avoid stagnation of water and connected to public drain

p) Sewage line connected to public sewer or septic tank (wherever public sewer is not available)

q) Rainwater harvesting system and recharge pits

r) Electricity connections which for the avoidance of doubt may be a 11/22/33/66 kV connection) and power supply at 415 V upto pillar of LT distribution transformer(s) located at the allocated Maintenance Depot.

s) Emergency exit gate/second entry or exit point if possible.

t) Emergency exits at buildings as per fire safety requirements

Article 7 REPRESENTATIONS AND WARRANTIES

7.1 Representations and warranties of the Operator

The Operator represents and warrants to the Authority that:

(a) it is duly organised and validly existing under the laws of India, and has full power and authority to execute and perform its obligations under this Agreement and to carry out the transactions contemplated hereby;

(b) it has taken all necessary corporate and other actions under Applicable Laws to authorise the execution and delivery of this Agreement and to validly exercise its rights and perform its obligations under this Agreement;

(c) along with its Associates, it has the financial standing and capacity to undertake the Project in accordance with the terms of this Agreement;

(d) this Agreement constitutes its legal, valid and binding obligation, enforceable against it in accordance with the terms hereof, and its obligations under this Agreement will be legally valid, binding and enforceable obligations against it in accordance with the terms hereof;

(e) it is subject to the laws of India, and hereby expressly and irrevocably waives any immunity in any jurisdiction in respect of this Agreement or matters arising thereunder including any obligation, liability or responsibility hereunder;

(f) the information furnished in the Bid and as updated on or before the date of this Agreement is true and accurate in all respects as on the date of this Agreement;

(g) the execution, delivery and performance of this Agreement will not conflict with, result in the breach of, constitute a default under, or accelerate performance required by any of the terms of its Memorandum and Articles of Association {or those of the Selected Bidder/ any member of the Consortium} or any Applicable Laws or any covenant, contract, agreement, arrangement, understanding, decree or order to which it is a party or by which it or any of its properties or assets is bound or affected;

(h) there are no actions, suits, proceedings, or investigations pending or, to its knowledge, threatened against it at law or in equity before any court or before any other judicial, quasi-judicial or other authority, the outcome of which may result in the breach of this Agreement or which individually or in the aggregate may result in any material impairment of its ability to perform any of its obligations under this Agreement;

(i) it has no knowledge of any violation or default with respect to any order, writ, injunction or decree of any court or any legally binding order of any Government Instrumentality which may

result in any material adverse effect on its ability to perform its obligations under this Agreement and no fact or circumstance exists which may give rise to such proceedings that would adversely affect the performance of its obligations under this Agreement;

(j) it has complied with Applicable Laws in all material respects and has not been subject to any fines, penalties, injunctive relief or any other civil or criminal liabilities which in the aggregate have or may have a material adverse effect on its ability to perform its obligations under this Agreement;

(k) it shall at no time undertake or permit any Change in Ownership except in accordance with the provisions of Clause 5.3; and that the {Selected Bidder/ Consortium Members}, together with {its/their} Associates, shall hold not less than 51% (fifty one per cent) of its issued and paid up Equity till the completion of 3 years from COD and 26% of its issued and paid up Equity thereafter; and that no Member of the Consortium (i) whose technical capacity was evaluated for the purposes of selection in response to the Request for Proposal; or (ii) who is an original equipment manufacturer (including its Associates), shall hold less than 26% (twenty six per cent) of the issued and paid up Equity till the expiry of the Concession Period;

(l) {the Selected Bidder/ Consortium Members and its/their} Associates have the financial standing and resources to fund the required Equity and to raise the debt necessary for undertaking and implementing the Project in accordance with this Agreement;

(m) {the Selected Bidder/ each Consortium Member} is duly organised and validly existing under the laws of the jurisdiction of its incorporation, and has requested the Authority to enter into this Agreement with the Operator pursuant to the Letter of Award, and has agreed to and unconditionally accepted the terms and conditions set forth in this Agreement;

(n) all its rights and interests in the Buses (if applicable pursuant to Clause 33.4), Maintenance Depot (including the Charging Infrastructure) shall pass to and vest in the Authority on the Transfer Date free and clear of all liens, claims and Encumbrances, without any further act or deed on its part or that of the Authority, and that none of the Project Assets shall be acquired by it, subject to any agreement under which a security interest or other lien or Encumbrance is retained by any person, save and except as expressly provided in this Agreement;

(o) no representation or warranty by it contained herein or in any other document furnished by it to the Authority or to any Government Instrumentality in relation to Applicable Permits contains or will contain any untrue or misleading statement of material fact or omits or will omit to state a material fact necessary to make such representation or warranty not

misleading;

(p) no sums, in cash or kind, have been paid or will be paid, by it or on its behalf, to any person by way of fees, commission or otherwise for securing the Agreement or entering into this Agreement or for influencing or attempting to influence any officer or employee of the Authority in connection therewith

(q) all information provided by the {Selected Bidder/ Consortium Members} in response to the Request for Proposal or otherwise, is to the best of its knowledge and belief, true and accurate in all material respects; and

7.2 Representations and warranties of the Authority

The Authority represents and warrants to the Operator that:

(a) it has full power and authority to execute, deliver and perform its obligations under this Agreement and to carry out the transactions contemplated herein and that it has taken all actions necessary to execute this Agreement, exercise its rights and perform its obligations, under this Agreement;

(b) it has taken all necessary actions under Applicable Laws to authorise the execution, delivery and performance of this Agreement;

(c) it has the financial standing and capacity to perform its obligations under this Agreement;

(d) this Agreement constitutes a legal, valid and binding obligation enforceable against it in accordance with the terms hereof;

(e) it has no knowledge of any violation or default with respect to any order, writ, injunction or any decree of any court or any legally binding order of any Government Instrumentality which may result in any material adverse effect on the Authority's ability to perform its obligations under this Agreement;

(f) it has complied with Applicable Laws in all material respects;

(g) it has good and valid right to the Depot Sites and Maintenance Depot, and has power and authority to grant a licence, in respect thereto to the Operator; and that the right to the sites are not subject to any encumbrances an/or litigation before any court of law.

(h) it shall not at any time during the term hereof, interfere with peaceful exercise of the rights and discharge of the obligations by the Operator, subject to and in accordance with the provisions of this Agreement; and

(i) it shall enable personnel of the Operator to travel on board the Buses for the purpose of discharging the Maintenance Obligations in accordance with the provisions of this Agreement and Good Industry Practice.

7.3 Disclosure

In the event that any occurrence or circumstance comes to the attention of

either Party that renders any of its aforesaid representations or warranties untrue or incorrect, such Party shall immediately notify the other Party of the same. Such notification shall not have the effect of remedying any breach of the representation or warranty that has been found to be untrue or incorrect nor shall it adversely affect or waive any right, remedy or obligation of either Party under this Agreement.

Article 8 DISCLAIMER

8.1 Disclaimer

8.1.1 The Operator acknowledges that prior to the execution of this Agreement, the Operator has, after a complete and careful examination, made an independent evaluation of the Request for Proposal, this Agreement, the Specifications and Standards, the Depot Sites, local conditions, physical qualities of ground, subsoil and geology and all information provided by the Authority or obtained, procured or gathered otherwise, and has determined to its satisfaction the accuracy or otherwise thereof and the nature and extent of difficulties, risks and hazards as are likely to arise or may be faced by it in the course of performance of its obligations hereunder. Save as provided in Clause 7.2, the Authority makes no representation whatsoever, express, implicit or otherwise, regarding the accuracy, adequacy, correctness, reliability and/or completeness of any assessment, assumption, statement or information provided by it and the Operator confirms that it shall have no claim whatsoever against the Authority in this regard.

8.1.2 The Operator acknowledges and hereby accepts the risk of inadequacy, mistake or error in or relating to any of the matters set forth in Clause 8.1.1 above and hereby acknowledges and agrees that the Authority shall not be liable for the same in any manner whatsoever to the Operator, the {Selected Bidder/ Members of Consortium} and its Associates or any person claiming through or under any of them.

8.1.3 The Parties agree that any mistake or error in or relating to any of the matters set forth in Clause 8.1.1 above shall not vitiate this Agreement.

8.1.4 In the event that either Party becomes aware of any mistake or error relating to any of the matters set forth in Clause 8.1.1, that Party shall immediately notify the other Party, specifying the mistake or error; provided, however, that a failure on part of the Authority to give any notice pursuant to this Clause 8.1.4 shall not prejudice the disclaimer of the Authority contained in Clause 8.1.1 and shall not in any manner shift to the Authority any risks assumed by the Operator pursuant to this Agreement.

8.1.5 Except as otherwise provided in this Agreement, all risks relating to the Agreement shall be borne by the Operator and the Authority shall not be liable in any manner for such risks or the consequences thereof.

Part III Development and Operations

Article 9 PERFORMANCE SECURITY

9.1 Performance Security

9.1.1 The Operator, for the performance of its obligations hereunder till the expiry of the Concession Period, has provided to the Authority, prior to the date of this Agreement, an irrevocable and unconditional guarantee from a Bank for a sum equivalent to **Rs. _____ (Rupees _____ (in words) only)** in the form set forth in Schedule-D (the "Performance Security").

9.1.2 The Parent/Associate of the Operator whose financial credentials were used by the Selected Bidder can also provide security on behalf of the Operator, provided that such Parent/Associate in addition to Schedule D submit a board resolution authorizing the Authority to invoke such Performance Security as per the provisions of the Concession Agreement.

9.2 Appropriation of Performance Security

9.2.1 The Authority shall, without prejudice to its other rights and remedies hereunder or in law, be entitled to encash and appropriate, from time to time and as many times as required by the Authority, from the Performance Security such amounts as may be due to it under this Agreement, including in respect of any Damages payable by the Operator for a failure to perform its obligations under this Agreement, for an Operator Default or for failure to meet any Condition Precedent, in accordance with the terms of this Agreement.

9.2.2 Upon any encashment and appropriation from the Performance Security by the Authority in accordance with the terms of the Agreement, the Operator shall, within 15 (fifteen) days thereof, replenish, in case of partial appropriation, to its original level the Performance Security, and in case of appropriation of the entire Performance Security provide a fresh Performance Security, as the case may be, and the Operator shall, within the time so granted, replenish or furnish fresh Performance Security as aforesaid failing which the Authority shall be entitled to terminate this Agreement in accordance with Article 32.

9.3 Release of Performance Security

9.3.1 The Performance Security shall remain in force and effect during the Concession Period, with an initial validity period of 3 years and extended upto the completion of concession period, and shall be returned to the Operator within 60 (sixty) days from the date on which the Concession Period Expires or upon Termination of this Agreement due to an Authority Default within 120 (one hundred and twenty) days of the Termination Date, without any interest, subject to any deductions which may be made by the Authority in respect of any amounts due and payable by the Operator to the Authority in accordance with the terms of this Agreement.

9.3.2 If the Performance Security is scheduled to expiry of the Concession Period,

then the Operator shall obtain an extension of the Performance Security or furnish a new Performance Security in the form set forth in Schedule-D at least 30 (thirty) days prior to the expiry of the Performance Security. If the Operator fails to extend or replace the Performance Security, the Authority shall be entitled to claim the entire amount then available under the Performance Security and retain such amount as a cash security until such time as the Operator submits an extension or replacement of the Performance Security to the satisfaction of the Authority.

Article 10 RIGHT OF WAY FOR DEPOTS

10.1 Site for the Maintenance Depot

The site for the Maintenance Depot shall comprise the real estate described in Schedule-A and in respect of which a license shall be provided and granted by the Authority to the Operator as a licensee under and in accordance with this Agreement (the "**Depot Site(s)**") in order for the Operator to carry out and perform its obligations under this Agreement.

In the event of Change of Scope Order in terms of Article 15 the Authority may allocate additional Depot Site(s) for such Change of Scope Order subject to provisions of Clause 10.3.5.

10.2 Licence and Right of Way for Maintenance Depot

10.2.1 The Authority hereby grants to the Operator access to the Depot Site for carrying out, at its sole risk and expense, any surveys, investigations and soil tests that the Operator may deem necessary prior to the Appointed Date. The Operator expressly agrees that the Authority shall have no liability whatsoever in respect of any survey, investigations and tests carried out or work undertaken by the Operator on or about the Depot Site pursuant hereto in the event of Termination or otherwise.

10.2.2 In consideration of the license fee of Re.1 (Rupee One) per annum, this Agreement and the covenants and warranties on the part of the Operator herein contained, the Authority, in accordance with the terms and conditions set forth herein, hereby grants to the Operator, effective from the dates specified in this Clause 10.2, leave and licence rights in respect of the Maintenance Depot at is the locations described, delineated and shown in Schedule- A hereto (the "**Licensed Premises**"), free of any Encumbrances, to develop, equip, operate and maintain the said Licensed Premises, together with all and singular rights, liberties, privileges, easements and appurtenances whatsoever to the said Licensed Premises, any part thereof belonging to or in any way appurtenant thereto or enjoyed therewith, for the duration of this Agreement and, solely for the purposes permitted under this Agreement, and for no other purpose whatsoever. The rights and obligations of the Operator over the Licensed Premises shall be co-terminus with its rights and obligations under this Agreement either by efflux of time or otherwise in accordance with the terms of this Agreement.

10.2.3 The Authority shall ensure that the Maintenance Depot handed over to the Operator under this Agreement comply in all respects with the Minimum Maintenance Depot Specifications.

10.2.4 The Authority shall, handover the Maintenance Depot within 30 days from the date of signing the Agreement or prior to the Appointed Date a, and grant to the Operator, vacant access, constructive possession and licenses to possess the Maintenance Depot- specified in Schedule A.

10.2.5 On and from the execution of Concession Agreement, the Authority shall

provide and grant to the Operator, vacant access, constructive possession and license to possess alternate Maintenance Depots, if any, in line with the Delivery Schedule so as to enable the Operator to deploy the Buses in accordance with the Deployment Plan. The timeline accordance with this Clause 10.2.5 below:

(a) within [1 (one)] month from the date of Signing this Agreement or prior to the Appointed Date, the Authority shall handover the Maintenance Depot situated as indicated in Schedule A;

(the above date is a "Scheduled Maintenance Depot Handover Date").

Note: The list of depots is provided in Schedule A -Annex I. For the purpose of this Clause the Alternate Maintenance Depot shall be notified at the time of execution of this Agreement.

10.2.6 Subject to Clause 10.2.7 below, in the event that the Authority fails to provide vacant access, constructive possession and license to possess the Maintenance Depot specified in Clause 10.2.5 above, which comply with the Minimum Maintenance Depot Specifications, on or prior to the respective Scheduled Maintenance Depot Handover Date, it shall pay to the Operator as Damages, Rs. 10,000 (Rupees ten thousand) per day per depot for each day of delay until, for all the Maintenance Depot required to be handed over by the Authority, vacant access, constructive possession and license to possess thereof is delivered to the Operator in accordance with the requirements of this Agreement.

10.2.7 If the Authority is unable to handover, to the Operator, Maintenance Depot which meet the Minimum Maintenance Depot Specifications by the relevant Scheduled Maintenance Depot Handover Date, then the Authority may, by way of a written notice provided at least 30 (thirty) days prior to the relevant Scheduled Maintenance Depot Handover Date, require the Operator to takeover possession and control of the Maintenance Depot on an "as is where is" basis. On and from the date on which the Operator takes over peaceful, vacant and unencumbered possession of the Maintenance Depot, the Operator shall, at the cost of the Authority and without prejudice to its obligations to carry out the Fit-Out Works, undertake and perform all such works and activities that may be required in order to ensure that the Maintenance Depot meets the Minimum Maintenance Depot Specifications. The scope of work required to be undertaken by the Operator in this regard, including the costs payable by the Authority for such work, shall be mutually discussed and agreed by the Parties by way of a Change of Scope Order. The Operator shall also be entitled to a mutually agreed extension of the Scheduled Maintenance Depot Completion Date, with such extension being not less than 90 (ninety) days.

10.2.8 Notwithstanding the provisions of Clause 10.2.2, the licence granted in respect of the Licensed Premises hereunder shall expire in respect of such Licensed Premises upon the transfer of the relevant Maintenance Depot upon the early termination or expiry of this Agreement.

10.3 Handover of the Licensed Premises

10.3.1 The Maintenance Depot that is to be handed over to the Operator pursuant to the terms of this Agreement, after the Appointed Date, the Authority's Representative and the Operator shall, on a mutually agreed date and time, inspect the Licensed Premises and prepare a memorandum containing an inventory of the Licensed Premises including the vacant and unencumbered land, buildings, structures, road works and trees on or attached to the Licensed Premises. Such memorandum shall have appended thereto a statement (the "Appendix") specifying in reasonable detail of those parts of the Licensed Premises of which vacant possession has not been granted to the Operator. Signing of the memorandum, in two counterparts (each of which shall constitute an original), by the authorised representatives of the Parties shall, subject to the provisions of Clause 10.2.2, be deemed to constitute a valid licence and Right of Way to the Operator for free and unrestricted use and development of the vacant and unencumbered Licensed Premises during the Concession Period under and in accordance with the provisions of this Agreement and for no other purpose whatsoever. For the avoidance of doubt, it is agreed that possession with respect to the parts of the Licensed Premises as set forth in the Appendix shall be deemed to have been granted to the Operator upon vacant access thereto being provided by the Authority to the Operator subject to Clause 10.2.6 and 10.2.7 if applicable.

10.3.2 Without prejudice to the provisions of Clause 10.3.1, the Parties hereto agree that the Authority shall have granted vacant possession and Right of Way to the Licensed Premises such that the Appendix shall not include more than 10% (ten per cent) of the total area of the Licensed Premises or such area as maybe mutually decided between the parties. and in the event Financial Close is delayed solely on account of delay in grant of such vacant access and Right of Way, the Authority shall be liable to payment of Damages under and in accordance with the provisions of Clause 21.1.1.

10.3.3 On and after signing the memorandum referred to in Clause 10.3.1, and until the Transfer Date, the Operator shall maintain a round-the-clock vigil over the Licensed Premises and shall ensure and procure that no encroachment thereon takes place, and in the event of any encroachment or occupation on any part thereof, the Operator shall report such encroachment or occupation forthwith to the Authority and undertake its removal at its cost and expenses.

10.3.4 The Authority shall make best efforts to procure and grant, no later than 30 (thirty) days from the relevant Scheduled Maintenance Depot Handover Date, the Right of Way to the Operator in respect of all land included in the Appendix, and in the event of delay for any reason other than Force Majeure or breach of this Agreement by the Operator, it shall pay to the Operator, Damages in a sum calculated at the rate of Rs. 1,000 (Rupees one thousand) per day for every 500 (five hundred) square metres or part thereof, commencing from the 31st (thirty first) day after the Scheduled Maintenance

Depot Handover Date and until such Right of Way is procured.

10.3.5 The Authority shall allocate to the Operator any other Maintenance Depot with the minimum depot infrastructure as mentioned under 6.1.3 or allocate additional space only for bus parking & Charging or space for opportunity charging or only a specific facility (office space/accommodation etc.) within its existing depots/ terminals or any other facility under the ownership of Authority and in compliance with Schedule AB as in case of any Change of Scope Order issued under Article 15, in accordance with this Agreement provided, further that the cost of shifting of Charging Infrastructure / Fit out Works in case of change of Maintenance Depot if requested under such Change of Scope Order under this Clause
10.3.5 shall be borne by the Authority and that the Maintenance Depot shall form part of the Licensed Premises under a separate Maintenance Depot License Agreement.

10.4 Maintenance Depot to be free from Encumbrances

The Maintenance Depot made available by the Authority to the Operator pursuant hereto shall be free from all Encumbrances and occupations and without the Operator being required to make any payment to the Authority on account of any costs, compensation, expenses and charges for the acquisition, development, possession and use of such Licensed Premises for the duration of the Concession Period, except insofar as otherwise expressly provided in this Agreement.

10.5 Protection of Site from encroachments

During the Concession Period, the Operator shall protect the Licensed Premises from any and all occupations, encroachments or Encumbrances, and shall not place or create nor permit any Contractor or other person claiming through or under the Operator to place or create any Encumbrance or security interest over all or any part of the Licensed Premises or the Project Assets, or on any rights of the Operator therein or under this Agreement, save and except as otherwise expressly set forth in this Agreement.

10.6 Access to the Authority

The licence, Right of Way and right to the Licensed Premises granted to the Operator hereunder shall always be subject to the right of access of the Authority and their employees and agents for inspection, viewing and exercise of their rights and performance of their obligations under this Agreement.

10.7 Geological and archaeological finds

It is expressly agreed that mining, geological or archaeological rights do not form part of the license granted to the Operator under this Agreement, and the Operator hereby acknowledges that it shall not have any mining rights or

interest in the underlying minerals, fossils, antiquities, structures or other remnants or things either of particular geological or archaeological interest. Such rights, interest and property on or under the Depot Sites shall vest in and belong to the Authority or the concerned Government Instrumentality. The Operator shall take all reasonable precautions to prevent its workmen or any other person from removing or damaging such interest or property and shall inform the Authority and any other concerned Government Instrumentality forthwith of the discovery thereof and comply with such instructions as the Authority or the concerned Government Instrumentality may reasonably give for the removal of such property. For the avoidance of doubt, it is agreed that any reasonable expenses incurred by the Operator hereunder shall be reimbursed by the Authority and to the extent that the Fit Out Works have been impeded as a result, the Operator shall be given an extension of time. It is also agreed that the Authority shall procure that the instructions hereunder are issued by the concerned Government Instrumentality within a reasonable period so as to enable the Operator to continue the Fit Out Works with such modifications as may be deemed necessary.

10.8 Felling of trees

The Authority shall procure any Applicable Permits required for felling of trees to be identified by the Operator for this purpose if and only if such trees cause a material adverse effect on the Fit Out Works or the Operation and Maintenance of the Maintenance Depot, as the case may be. In the event of any delay in felling thereof for reasons beyond the control of the Operator, it shall be excused for failure to perform any of its obligations hereunder if such failure is a direct consequence of delay in the felling of trees. For the avoidance of doubt, the costs and expense in respect of felling of trees shall be borne by the Operator and any revenues thereof shall be paid to the Authority.

10.9 Unforeseen Site Conditions

If, after the Maintenance Depots are handed over the Operator in accordance with this Article 10, the Operator encounters any adverse physical conditions at the Licensed Premises, which could not have been reasonably foreseen by acting in accordance with Good Industry Practices, the Operator may seek a Change of Scope in accordance with Article 15. Upon receipt of a request for a Change of Scope due to unforeseen conditions relating to the Licensed Premises, if, in the opinion and sole discretion of the Authority, such conditions could not have been reasonably foreseen by a prudent developer acting in accordance with Good Industry Practices, then the Authority shall issue a Change of Scope Order in accordance with Article 15. Any decision of the Authority regarding the existence of any unforeseen conditions relating to the Licensed Premises shall be final and binding.

Article 11 UTILITIES, ASSOCIATED ROADS AND TREES

11.1 Existing utilities and roads

Notwithstanding anything to the contrary contained herein, the Operator shall ensure that the respective entities owning the existing roads, right of way or utilities on, under or above the Depot Site(s) are enabled by it to keep such utilities in continuous satisfactory use, if necessary, by providing suitable temporary or permanent diversions with the authority of the controlling body of that road, right of way or utility, and the Authority shall, upon written request from the Operator, initiate and undertake at its cost, legal proceedings for acquisition of any right of way necessary for such diversion, in accordance with relevant laws and procedures.

11.2 Shifting of obstructing utilities

The Operator shall, subject to Applicable Laws and with assistance of the Authority, undertake shifting of any utility including electric lines, water pipes and telephone cables, to an appropriate location or alignment within or outside the Depot Site if and only if such utility causes or shall cause a Material Adverse Effect on the Fit Out Works, Operation or Maintenance of the Maintenance Depot. The cost of such shifting shall be borne by the Authority or by the entity owning such utility, if the Authority so directs, and in the event of any delay in shifting thereof, the Operator shall be excused for failure to perform any of its obligations hereunder if such failure is a direct consequence of delay on the part of the entity owning such electric lines, water pipes or telephone cables, as the case may be.

11.3 New utilities and transport systems

The Operator shall allow, subject to such conditions as the Authority may specify, access to, and use of the Depot Sites for laying telephone lines, water pipes, electric cables or other public utilities. Where such access or use causes any financial loss to the Operator, the Authority shall pay compensation or damages as per Applicable Laws. For the avoidance of doubt, it is agreed that use of the Depot Site(s) under this Clause shall not in any manner relieve the Operator of its obligation to undertake the Fit Out Works and Operate and Maintain the Maintenance Depot in accordance with this Agreement and any damage caused by such use shall be restored forthwith.

Article 12 COMPLETION OF THE MAINTENANCE DEPOTS

12.1 Road Connectivity

The Authority shall, at its own cost and expense, provide, or cause to be provided road connectivity (sufficient for the movement of the Buses and other vehicles and machinery required for the Operation and Maintenance of the Maintenance Depot) between the boundary of the relevant Maintenance Depot and the nearest motorable road, by no later than the timeline specified in Clause 10.2.4 and 10.2.5.

12.2 Obligations prior to commencement of construction

Prior to commencement of the Fit Out Works, the Operator shall:

(a) submit to the Authority its detailed design, construction methodology, quality assurance procedures, and the procurement, engineering and construction time schedule for completion of the Fit Out Works at the Maintenance Depot (including installation of the Charging Infrastructure);

(b) appoint its representative duly authorised to deal with the Authority in respect of all matters under or arising out of or relating to this Agreement;

(c) undertake, do and perform all such acts, deeds and things as may be necessary or required before commencement of the Fit Out Works under and in accordance with this Agreement, the Applicable Laws and Applicable Permits; and

(d) make its own arrangements for quarrying of materials needed, if any, for the Maintenance Depot under and in accordance with the Applicable Laws and Applicable Permits.

(e) Prepare and submit to the authority a labour management plan for compliance with relevant labour laws and regulations. The plan will include among others- Working conditions and terms of employment, non-discrimination and equal opportunity, grievance mechanism, prevention of sexual harassment and abuse, occupational and community health and safety requirements.

12.3 Maintenance during Fit Out Period

While undertaking the Fit Out Works, the Operator shall maintain, at its cost, the existing roads along the alignment of the Maintenance Depot so that their traffic worthiness and safety are at no time materially inferior as compared to their condition 7 (seven) days prior to the date on which such Maintenance Depot are handed over by the Authority, and shall undertake the necessary repair and maintenance works for this purpose; provided that the Operator may, at its cost, interrupt and divert the flow of traffic if such interruption and diversion is necessary for the efficient progress of the Fit Out Works and conforms to Good Industry Practice. For the avoidance of doubt, it is agreed that the Operator shall at all times be responsible for ensuring

safe operation of the existing roads along the alignment of the Maintenance Depots.

12.4 Drawings

In respect of the Operator's obligations relating to the Drawings of the Maintenance Depot as set forth in Schedule-F, the following shall apply:

(a) The Operator shall prepare and submit, with reasonable promptness, 3 (three) copies each of all Drawings to the Authority for review.

(b) By submitting the Drawings for review to the Authority, the Operator shall be deemed to have represented that it has determined and verified that the design and engineering of the Fit Out Works, including the field construction criteria related thereto, are in conformity with the Scope of the Agreement, Specifications and Standards, Applicable Laws and Good Industry Practice.

(c) Within 15 (fifteen) days of the receipt of the Drawings, the Authority shall review the same and convey its observations to the Operator with particular reference to their conformity or otherwise with the Scope of the Agreement and the Specifications and Standards. The Operator shall not be obliged to await the observations of the Authority on the Drawings submitted pursuant hereto beyond the said 15 (fifteen) days period and may begin or continue the Fit Out Works at its own discretion and risk. However, if the Authority fails to provide its observations on the Drawings submitted by the Operator within 30 (thirty) days of receipt of such Drawings, the Drawings shall be deemed to be approved subject to the Operator issuing a notice of reminder to the Authority at least 7 (seven) days prior to the expiry of the aforesaid 30 (thirty) day period. In the event of failure of the Authority to give any observation on the drawing within the aforesaid 15 days and the Operator having already commenced the fit out work with its drawings and thereafter the Authority decides to give the observation before the expiry of aforesaid 30 days; the Authority may unless there is substantial changes to be made in the drawings which if not made will not meet the Specifications and Standards within the Scope of the Agreement; approve the drawings being in conformity the Scope of the Agreement and the Specifications and Standards

(d) If the aforesaid observations of the Authority indicate that the Drawings are not in conformity with the Scope of the Agreement or the Specifications and Standards, such Drawings shall be revised by the Operator within 7 days and resubmitted to the Authority for review. The Authority shall give its observations, if any, within 7 (seven) days of receipt of the revised Drawings.

(e) No review and/or observation of the Authority and/or its failure to review and/or convey its observations on any Drawings shall

relieve the Operator of its obligations and liabilities under this Agreement in any manner nor shall the Authority be liable for the same in any manner.

(f) Within 90 (ninety) days of the issuance of the Maintenance Depot Completion Certificate for the Maintenance Depot, the Operator shall furnish to the Authority a complete set of as-built Drawings, in 2 (two) hard copies and in its editable digital format or in such other medium and manner as may be acceptable to the Authority, reflecting the Fit Out Works actually designed, engineered and constructed, including an as-built survey illustrating the layout of the Maintenance Depots and setback lines, if any, of the buildings and structures.

12.5 Completion of the Maintenance Depots

12.5.1 On and from the date on which the Authority hands over possession of the Maintenance Depots to the Operator pursuant to Clause 10.2.4, 10.2.5 or 10.2.6, as the case may be, the Operator shall undertake the Fit Out Works for such Maintenance Depot in conformity with the Specifications and Standards set forth in Schedule-B. Subject to Clause 10.2.6, the Operator shall complete the Fit Out Works within 6 (six) weeks subject to Clause 10.2.27 from the date on which the Maintenance Depot is handed over by the Authority pursuant to Clause 10.2.4 and 10.2.5 (each date the "Scheduled Maintenance Depot Completion Date") .

12.5.2 In the event that the Operator fails to complete the Fit Out Works by the Scheduled Maintenance Depot Completion Date (as may be extended in accordance with the terms of this Agreement),unless such failure has occurred due to a Delay Event, it shall pay Damages to the Authority in a sum calculated at the rate of 0.1% (zero point one per cent) of the amount of Performance Security per bus times the number of buses allocated to the specific depot for each day of delay until the Fit Out Works are completed and the relevant Maintenance Depot is ready to be put into commercial operation. For the avoidance of doubt, it is agreed that recovery of Damages under this Clause 12.5.2 shall be without prejudice to the rights of the Authority under this Agreement, including the right of Termination thereof.

12.5.3 In the event that the Maintenance Depot Completion Date, for any Maintenance Depot, does not occur within 270 (two hundred and seventy) days from the relevant Scheduled Maintenance Depot Completion Date (as may be extended in accordance with the terms of this Agreement), unless the delay is on account of a Delay Event, the Authority shall be entitled to terminate this Agreement for an Operator Default and the consequences of such termination as set out in Article 33 shall apply.

12.5.4 Upon completion of the Fit Out Works at Maintenance Depot, the Operator shall issue a notice to the Authority pursuant to which the Authority, or the Authority's Representative, shall, within 7 (seven) days from the date of such notice, inspect the Maintenance Depot to assess its conformity with the Specifications and Standards. If the Maintenance Depot complies with the

Specifications and Standards, the Authority shall issue a completion certificate for the Maintenance Depot ("**Maintenance Depot Completion Certificate**"). If, however, pursuant to any inspection undertaken by the Authority, or the Authority's Representative, any defects or deficiencies are identified in the Maintenance Depot, the Operator shall, no later than 30 (thirty) days from the date of such notice, rectify and remedy such defects or deficiencies and shall issue a notice to the Authority pursuant to which the Authority may re-inspect the Maintenance Depot. The process set out in this Clause 12.5.4 shall continue until all defects and deficiencies in the Maintenance Depot have been rectified and the Authority has issued the Maintenance Depot Completion Certificate for such Maintenance Depot.

12.6 Extension of Time

12.6.1 Subject to Clause 12.6.2 below, the Operator shall be entitled to a day-for-day extension of the relevant Scheduled Maintenance Depot Completion Date and the Delivery Schedule if and only to the extent that performance of the Fit Out Works for such Maintenance Depot or the procurement of the Buses is, or will be, delayed due to a Delay Event.

12.6.2 The Operator shall promptly provide the Authority with:

i. a notice upon becoming aware of any Delay Event; and
ii. a notice of its claim for extension the Scheduled Maintenance Depot Completion Date and Delivery Schedule, with such notice specifying the nature of the Delay Event, the extent of delay suffered or likely to be suffered by the Operator, the mitigation measures being taken or proposed to be taken by the Operator in order to minimise the impact of the Delay Event, and any other information relevant to claim such extension.

Subject to Clause 12.6.3 below, the issuance of such notice within 7 (seven) days from the date the Operator became aware of the Delay Event shall be a condition precedent to the Operator's entitlement to an extension under this Clause 12.6.

12.6.3 Where a Delay Event has a continuing effect or where the Operator is unable to determine whether the effect of a Delay Event will actually cause delay to the Fit Out Works or procurement of the Buses, so that it is not practical for the Operator to provide notice in accordance with Clause 12.6.2 above, a statement to that effect with reasons together with any other relevant information shall be submitted in place of the notice required pursuant to Clause 12.6.2. In such an event, the Operator shall, as soon as reasonably practical, submit to the Authority the information required pursuant to Clause 12.6.2.

12.6.4 Without prejudice to the Operator's obligations to notify the Authority regarding the occurrence of a Delay Event above, the Operator shall: (i) keep and maintain records to accurately substantiate and establish claims for extensions under this Clause 12.6; and (ii) give the Authority access to such records and documents or provide the Authority with copies, if so

requested.

12.6.5 If in the opinion of the Operator that there are two or more concurrent causes of delay but as per the terms of the Agreement out of those concurrent causes only one of those concurrent causes is a cause of delay in performance of the Agreement which would entitle the Operator to an extension of time in accordance with this Clause 12.6, then the Operator shall be entitled to an extension of time under Clause 12.6 only on the basis of the cause which in the Opinion of the Authority has caused delay in performance of the Agreement and not on the basis of other concurrent causes..

12.6.6 The Operator shall not be entitled to any extension of time for any reason whatsoever, including due to:

(i) delay caused in complying with any instructions of the Authority which are directly attributable to any act or omission of the Operator;
(ii) failure of any Contractor to commence or carry out any work within the prescribed timelines;
(iii) unavailability or shortage of equipment, materials or any other resources (including any utilities); or
(iv) inclement weather conditions except in case of Force Majeure.

12.6.7 Any Dispute between the Parties with respect to the occurrence, length of subsistence or consequence of any Delay Event shall be settled in a final and binding manner in accordance with the Dispute Resolution Procedure.

Article 13 PROCUREMENT OF BUSES

13.1 Standards and Specifications

The Operator shall procure Buses meeting all the Specifications and Standards provided in Schedule-B.

13.2 Ownership of Buses

The Operator agrees that it shall be solely responsible for the procurement of Buses. Subject to the terms of this Agreement, the Parties agree that during the Concession Period, ownership of the Buses shall remain with the Operator and the Operator shall cause all Buses to be registered in the name of the Operator, or, where title and ownership of the Buses lies with any other Person pursuant to the terms of any Project Agreement, in the name of such Person, and the Authority shall not exercise any right, title, or interest over any of the Buses, unless provided otherwise under the terms of this Agreement. The Operator shall have the right to lease the Buses required to be provided under this Agreement under the Bus Lease Agreements on terms that are consistent with this Agreement.

13.3 Delivery Schedule

The Operator shall procure the Buses as per the Delivery Schedule provided in Schedule- G hereto and shall ensure the Buses are ready for Commencement of Service in accordance with Article 14. The Operator further agrees that prior to procurement of the Buses, it shall procure a Prototype Bus for the approval of the Authority in accordance with Clause 13.4.

13.4 Prototype

13.4.1 The Operator shall, within 10 (ten) days from the date of signing of this agreement, provide to the Authority (or any nominee appointed by it for this purpose) 5 (five) copies of the Designs and Drawings (along with soft copies) of a sample Bus that conforms to the Specifications and Standards (the "Prototype"), as specified in Schedule-F. Provided that the Operator may, share only the details of the layout of the Prototype and not share any propriety information forming part of Designs and Drawings of the Prototype.

13.4.2 The Authority, or any independent third party agency appointed by the Authority for this purpose, shall depute a team of experts for undertaking a review of the Designs and Drawings to ensure compliance with the requirements of this Agreement. Based on the review, the Authority (or its nominee) shall prepare and submit a report (the "**Design Report**") highlighting therein, amongst other aspects, any specific non-compliances in the Designs and Drawings with the requirements of this Agreement. The Authority (or its nominee) shall submit a copy of the Design Report to the Operator within 7 (seven) days from the date of receiving the Designs and

Drawings of the Prototype from the Operator. It is agreed that any failure or omission of the Authority, or its nominee, to review and/ or comment on the Designs and Drawings or to highlight any deficiency therein shall not be construed or deemed as acceptance of any such Designs and Drawings by the Authority, or its nominee (if any) and, notwithstanding anything to the contrary, the Operator acknowledges and agrees that it is the sole responsibility of the Operator to ensure that the Designs and Drawings are fully in compliance with the requirements of this Agreement.

13.4.3 Pursuant to the Design Report or otherwise, the Operator shall carry out such modifications in the Designs and Drawings as may be necessary in order for the Prototype to conform to the requirements of this Agreement, including without limitation, the Specifications and Standards. The Authority expressly agrees that it (and any nominee of the Authority) shall, subject to the provisions of this Agreement and Applicable Laws, maintain the confidentiality of any Designs and Drawings provided to them by the Operator and shall endeavour to protect the Intellectual Property rights of the Operator, if any, therein.

13.5 Tests at Manufacturer's Plant

13.5.1 Prior to procuring the supply of the Prototype, the Operator shall carry out, or cause to be carried out on the Prototype, at its own cost and expense, all Tests in accordance with Schedule- H and such other tests that the Operator may consider necessary to demonstrate that the Prototype complies in all respects with the requirements of this Agreement, including the Specifications and Standards. The Operator shall provide to the Authority (or its nominee) forthwith, a copy of the Operator's report on each test containing the results of such test and the action, if any, that it proposes to take for compliance with the requirements of this Agreement, including the Specifications and Standards.

13.5.2 The Operator shall, with at least 2 (two) weeks' notice to the Authority, convey the date, schedule and type of tests that shall be conducted on the Prototype at the manufacturer's plant and the testing agency nominated by the Authority shall have the right to witness the tests. It is clarified that all costs incurred on account of the visit of testing agency to the manufacturer's plant shall be borne by the Operator.

13.5.3 The testing agency shall prepare and submit a report forthwith on the tests witnessed by it highlighting therein, amongst other aspects, any specific non-compliances with the requirements of this Agreement. The testing agency shall submit a copy of this report to the Operator and the Authority for review. The Operator shall, prior to dispatch of the Prototype for delivery to the Authority, procure that defects and deficiencies, if any, are rectified and the Prototype conforms with the Specifications and Standards. It is agreed that any failure or omission of the testing agency appointed by Authority, to witness and/or comment on any tests conducted or to highlight any deficiency therein shall not be construed or deemed as acceptance of such tests by the Authority and, notwithstanding anything to the contrary,

the Operator acknowledges and agrees that it is the sole responsibility of the Operator to ensure that the tests carried out on the Prototype are fully in compliance with the requirements of this Agreement.

13.5.4 In the event of failure of any Test specified in Clause 13.5.1, the Operator shall rectify the defect and conduct repeat Tests, and the procedure specified in this Clause 13.5 shall apply *mutatis mutandis* to such repeat Tests.

13.6 Supply of Prototype

13.6.1 The Operator shall, no later than 30 (thirty) days from the approval of Designs and Drawings, submitted as per Clause 13.4.1, procure and deliver a Prototype and demonstrate to the Authority, the tests and trials conducted in accordance with the provisions of Clause 13.5.

13.6.2 In the event that the Operator fails to procure the Prototype within the period specified in Clause 13.6.1, the Authority may recover from the Operator an amount equal to 0.5% (zero point five per cent) of the Performance Security as Damages for each and every week, or part thereof, by which the delivery of the Prototype is delayed; provided that such Damages shall not exceed 10% (ten per cent) of the Performance Security.

13.7 Acceptance of Prototypes

13.7.1 Upon procurement of the Prototype by the Operator, the Authority (or its nominee) shall, for determining that the Prototype conforms to the requirements of this Agreement, including the Specifications and Standards, inspect the Prototype. Once the Operator has successfully demonstrated to the testing agency that the Prototype conforms to the requirements of this Agreement, including pursuant to any tests required to be undertaken based on instructions from the Authority, the Authority shall, no later than 7 (seven) days from such date, issue a notice to the Operator, certifying that the Prototype is in compliance with the requirements of this Agreement, including the Specifications and Standards. The preparation and modifications of the prototype should be examined by experts pertaining to accessibility and safety to ensure that universal design principles are integrated into the design of the buses.

13.7.2 The Parties expressly agree that acceptance of the Prototype by the Authority (or its nominee) shall not relieve or absolve the Operator of its obligations and liabilities under this Agreement in any manner whatsoever.

13.8 Procurement of Buses

Upon approval of the Prototype in accordance with Clause 13.7, the Operator shall procure the remaining Buses in accordance with the provisions of Schedule-G and shall comply with timelines of the Delivery Schedule specified therein. The Operator agrees that the Buses shall include the same specifications and standards as the approved Prototype provided in this Article 13.

13.9 Delay in Procurement

13.9.1 In the event the Operator is unable to procure any Bus as per this Article 13, for reasons not directly attributable to a Delay Event, the Operator shall pay Damages at the rate of 0.1
% (zero point one per cent) of the Performance Security per bus for each day of delay for each Bus (whose procurement is delayed) till the date of procurement of such Bus.

13.9.2 If the procurement of any Bus is delayed by a period exceeding 45 (forty five) days from the scheduled date of procurement of such Bus as provided in the Delivery Schedule, for reasons not directly attributable to a Delay Event, or if the Damages payable by the Operator for such delay in procurement of Buses exceeds 10% (ten percent) of the Performance Security, notwithstanding anything provided in this Agreement, it shall be regarded as an Operator Default.

The Damages payable by the Operator shall become due and payable within 7 (seven) days of receipt of notice in this regard from the Authority.

13.10 Readiness for Commencement of Service

13.10.1 The Operator agrees that it shall undertake such activities as required under Applicable Law, Applicable Permits and Good Industry Practice in order to ensure that each Lot of Buses procured in accordance with the Delivery Schedule are ready for Commencement of Service. Without limiting the generality of the foregoing, such activities shall include:

(a) joint inspection with the Authority of the Buses proposed to be introduced into service;
(b) obtaining the certificate of registration for each Bus proposed to be introduced into service;
(c) obtaining the certificate of fitness for each Bus proposed to be introduced into service;
(d) payment of all applicable Taxes;
(e) obtaining insurance for each Bus proposed to be introduced into service in accordance with Article 25; and
(f) any other readiness related activity to ensure roadworthiness of the Buses proposed to be introduced into service.

13.10.2 The Operator shall achieve readiness for Commencement of Service for each Lot of Buses procured by it in accordance with Article 14, no later than 30 (thirty) days from the date of procurement of such Lot of Buses, or any extended period as may be agreed upon by the Parties.

13.10.3 The Parties hereto expressly agree that if the delay in achieving readiness for Commencement of Services for any Lot of Buses procured has arisen solely and directly on account of any Delay Event, the Operator shall be entitled to such additional time as may be reasonably required by the circumstances of the case for achieving readiness for Commencement of Services.

Article 14 ENTRY INTO COMMERCIAL SERVICE

14.1 Inspection by the Authority

14.1.1 The Authority (or its nominee) may inspect each Bus or any Lot of Buses procured by the Operator, in accordance with the provisions of this Clause 14.1, prior to the Operator putting such Bus into operation.

14.1.2 The Operator shall notify the Authority, no later than 45 (forty-five) days prior to the date of procurement of the Buses, the date and time on which each Lot of Buses is to be procured and available for inspection. The Authority may, in its discretion, nominate its representative to carry out an inspection of such Buses at a scheduled date and time. The operator will include two signages inside the bus that clearly states the helpline numbers for women. The placements of the panic button are to be highlighted. The operator to include signage appropriate for persons with disability

14.1.3 The Operator shall provide the assistance necessary for the Authority Representative to perform the inspection in accordance with the provisions of this Clause 14.1. For the avoidance of doubt, the Parties expressly agree that such inspection shall be completed within a period of 72 (seventy two) hours from the time when a Bus is made available for inspection and upon expiry thereof, the Bus shall, subject to satisfactory completion of the safety inspection under Clause 14.1.2, be deemed to have been approved by the Authority.

14.1.4 The Operator shall ensure that all Buses meet the prescribed safety standards as set out in the Specifications and Standards and Applicable Law, including but not limited to, ensuring that the Buses are fitted with CCTV cameras, automatic vehicle locator systems, fire and smoke detection equipment and panic buttons designed to send real-time alerts to the Control Centre. In the event that, pursuant to any inspection conducted in accordance with Clause 14.1, the Authority's Representative concludes that any Bus does not conform with the safety standards set out in the Specifications and Standards and this Agreement, and is therefore not safe for entry into service, it shall convey to the Parties forthwith, a report stating in detail the reasons for its findings. The Operator shall, notwithstanding anything to the contrary contained in this Article 14, not introduce such Bus into service until all defects and deficiencies have been rectified by the Operator and the Bus has been presented to the Authority for re-inspection. Upon presentation by the Operator of any such Bus for introduction in service, the Authority's Representative shall re-inspect such Bus and upon it being satisfied that the Bus conforms to the safety standards set out in the safety and accessibility standards and this Agreement, the Operator shall be allowed to introduce such Bus into service.

14.1.5 The Authority Representative shall, pursuant to any inspection conducted under this Clause 14.1, also submit an inspection report for each Bus identifying any minor defects and deficiencies required to be rectified by the Operator in conformity with the Specifications and Standards (the "**Punch List**"). The Operator shall, no later than 30 (thirty) days from the date on which it receives the Punch List, rectify each item in the Punch List and notify the Authority of the same. The Authority may, in its discretion, inspect the Bus within 7 (seven) days thereof. and in the event that any Punch List items remain un-rectified, the Operator shall pay to the Authority as Damages, an amount of 1% (one per cent) of the Performance Security for each day of delay until all items of the Punch List for the particular bus are rectified.

14.2 Commercial Operation Date (COD) for Respective Lot of Buses

14.2.1 The Operator shall within 30 (thirty) days from the date of delivery of each respective Lot of Buses (as mentioned in the Delivery Schedule) comply with the following:

(a) ensure activities related to readiness for Commencement of Services are completed;
(b) appoint duly experienced and trained drivers holding valid driving licenses in accordance with Applicable Law;
(c) deposit copy of the driving licenses of the appointed drivers with the Authority; and
(d) ensure that the Maintenance Depot Completion Certificate has been issued in accordance with Clause 12.5.4 for each Maintenance Depot;
(e) ensure that the Charging Infrastructure required for the charging of such Lot of Buses has been installed and is commissioned and ready to operate in accordance with the requirements of this Agreement; and
(f) procure and install the necessary movable assets such as plant and equipment, materials, consumables, etc. at the Maintenance Depot as required for the Operation and Maintenance of the Buses, the Maintenance Depot and the Charging Infrastructure.
(g) Ensure that the operator undertakes a police verification of all drivers

14.2.2 Upon completing the activities enumerated in Clause 14.2.1 above for the each Lot of Buses, the Operator shall intimate in writing to the Authority of its readiness to achieve COD for such Lot of Buses, along with detailed proof of completing each such activity. The Authority shall, within 2 (two) days of receiving such written intimation, inspect the relevant documents and the Maintenance Depot, including the Charging Infrastructure, to determine compliance by the Operator with its obligations in Clause 14.2.1 above. Upon being satisfied that the Operator has duly complied with all the requirements set forth in Clause
14.2.1 above for achieving COD for such Lot of Buses, the Authority shall within a period no longer than 5 (five) days from such inspection, issue to the Operator a Completion Certificate (the "**Completion Certificate**") for such Lot of Buses. In the event, any deficiencies or shortcomings are observed by the Authority in relation to the fulfilment by the Operator of its obligations under Clause 14.2.1 for any particular Buses, the Authority shall exclude such Buses from the relevant Lot and shall issue a Completion Certificate with respect to the remaining Buses in the Lot. For the Buses that have been excluded from a particular Lot, the Authority shall issue a notice to the Operator within 2 (two) days of such inspection highlighting the deficiencies or shortcomings. The Operator shall rectify/remove the deficiencies within such period as specified by the Authority and the Authority shall, upon being satisfied that the deficiencies identified by it have been rectified, forthwith issue the Completion Certificate for such Buses. Provided however, that if the deficiencies or shortcomings observed by the Authority are minor in nature and can be rectified in the usual course of performing Operations and Maintenance of the Buses, the Authority shall not withhold the Completion Certificate for such Lot of Buses. Provided further that the issuance of the Completion Certificate in such cases does not, in any manner, affect the Operator's obligation to rectifying any deficiencies or shortcomings identified by the Authority.

14.2.3 The date of issuance of the Completion Certificate for a particular Lot of Buses shall be reckoned as the "**Lot Commercial Operation Date**" or "**Lot COD**" under this Agreement. The date when the Completion Certificate is issued for all Lots of

Buses required to be introduced into service by the Operator, shall be the Commercial Operation Date ("**COD**") under this Agreement whereupon the Project enters into commercial service, provided, however, that the entry of any Buses into commercial service shall always be subject to compliance with the provisions of Clause 18.3. After a Lot COD, the Operator shall ensure Commencement of Service of the Buses in such Lot in accordance with the Deployment Plan.

14.2.4 In the event, the Authority fails to issue the Completion Certificate and the notice for deficiency in respect of Buses for which Completion Certificate is withheld under Clause 14.2.2, then the COD for the said Lot of Buses will be deemed ("Deemed Lot COD') to have been achieved on the 7th day after receipt of the notice of the Operator towards readiness for operations for the concerned Lot of Buses.

14.3 Damages for delay

If COD does not occur prior to the 91st (ninety first) day after the Scheduled Maintenance Depot Completion Date for the last Maintenance Depot handed over by the Authority pursuant to Clause 10.2.5, as the same may be extended in accordance with the terms of this Agreement (such date, the **"Scheduled COD"**), for reasons not directly attributable to a Delay Event, the Operator shall pay Damages to the Authority calculated at the rate of 0.1% (zero point one per cent) of the amount of Performance Security per bus times the number of buses allocated to the specific depot for each day of delay until COD is achieved. Provided however, if the Operator is unable to achieve COD on account of a Delay Event, then the Operator shall be entitled to a day-for-day extension of the Scheduled COD if and only to the extent that COD is, or will be, delayed due to a Delay Event. In this context, the provisions of Clause 12.6 shall apply to any extension of the Scheduled COD that is sought by the Operator.

14.4 Damage due to accident

14.4.1 The Operator shall be liable for any damage to the Bus on account of accidents. The Operator agrees that it shall undertake repair and rectification of such damaged Bus such that the Bus conforms to the Specifications and Standards, to the satisfaction of the Authority.

14.4.2 The Operator agrees that the Authority shall not be responsible for any liability arising out of any civil or criminal proceedings instituted by any third party, as a result of such accident of the Bus and the Operator agrees that it shall keep the Authority and its officers, servants, agents, indemnified from and against any and all suits, proceedings, actions, demands and third party claims for any loss, damage, injury, death, cost and expense of whatever kind and nature arising from such accidents.

14.4.3 The Operator shall notify the relevant Government Instrumentalities and the Authority of any accidents verbally, within 1 (one) hour of its occurrence followed by a written notice (setting out in reasonable detail the cause of the accident and the steps taken or proposed to be taken by the Operator in connection with the same) and in the event, such accident involves any fatality, the Operator shall intimate such accident verbally within 5 (five) minutes of the occurrence of such accident, followed by a written notice (setting out in reasonable detail the cause of the accident and the steps taken or proposed to be taken by
the Operator in connection with the same). Where any persons involved in the accident have suffered physical injuries, the Operator shall co-ordinate with the relevant Government Instrumentalities to ensure timely medical help, treatment and compensation in accordance with the Employees Compensation Act, 1923 and any

other applicable laws.. The Authority shall provide reasonable assistance and support to the Operator in such situation.

14.4.4 In the event of an accident of a Bus leading to its complete destruction, such that the Bus cannot be repaired and operated in normal circumstances, and is rendered inoperable, the Operator shall replace such damaged Bus with a new Bus of such make and model which meets the Specifications and Standards and as acceptable to the Authority. The Operator agrees that any Bus brought as a replacement to a damaged Bus in accordance with this Clause 14.4.4 shall be used in the Bus Service for the remaining Concession Period.

Article 15 CHANGE OF SCOPE

15.1 Change of Scope

15.1.1 The Authority may, notwithstanding anything to the contrary contained in this Agreement, require the provision of upgraded technology or additional works and services in the Buses or at the Maintenance Depot, which are not included in the Scope of the Agreement (the "Change of Scope"). Any such Change of Scope shall be made in accordance with the provisions of this Article 15 and the costs thereof shall be expended by the Operator and reimbursed to it by the Authority in accordance with this Article 15.

15.1.2 If the Operator determines at any time that a Change of Scope is necessary for providing safer and improved services, it shall by notice in writing require the Authority to consider such Change of Scope. The Authority shall, within 30 (thirty) days of receipt of such notice, either accept such Change of Scope with modifications, if any, and initiate proceedings in accordance with this Article 15 or inform the Operator in writing of its reasons for not accepting such Change of Scope, as the case may be.

15.2 Procedure for Change of Scope

15.2.1 In the event that the Authority determines that a Change of Scope is necessary, it shall issue to the Operator a notice specifying in reasonable detail the works and services contemplated thereunder (the "Change of Scope Notice").

15.2.2 Upon receipt of a Change of Scope Notice, the Operator shall, with due diligence, provide to the Authority such information as is necessary, together with preliminary Documentation in support of:

(a) the impact, if any, which the Change of Scope is likely to have on the time required for completing the Fit Out Works and the Delivery Schedule, if the Change of Scope is required to be carried prior to COD; and

(b) the options for implementing the proposed Change of Scope and the effect, if any, each such option would have on the costs and time thereof, including a detailed breakdown by work classifications specifying the material and labour costs calculated in accordance with Good Industry Practice.

15.2.3 Upon receipt of information set forth in Clause 15.2.2, if the Authority decides to proceed with the Change of Scope, it shall convey its preferred option to the Operator, and the Parties shall thereupon make good faith efforts to agree upon the time and costs for implementation thereof. Upon reaching an agreement, the Authority shall issue an order (the "**Change of Scope Order**") requiring the Operator to proceed with the performance thereof. In the event that the Parties are unable to agree, the Authority may, by issuing a Change of Scope Order, require the Operator to proceed with the performance thereof pending resolution of the Dispute in accordance with the Dispute Resolution Procedure.

15.2.4 The provisions of this Agreement, insofar as they relate to Tests, shall apply *mutatis mutandis* to any modifications in the Buses undertaken by the Operator under this Article 15.

15.3 Payment for Change of Scope

15.3.1 Unless otherwise mutually agreed by the Parties, within 15 (fifteen) days of issuing a Change of Scope Order, the Authority shall make a part payment to the Operator of a sum equal to 20% (twenty per cent) of the cost of Change of Scope as determined pursuant to Clause 15.2 upon the submission by the Operator of a bank guarantee for an equivalent amount, which bank guarantee shall be valid for a period of 180 (one hundred and eighty) days, substantially in the form specified in Schedule-D. To the extent that the work under the Change of Scope Order is not completed within a period of 180 days from the date of the Change of Scope Order, the Operator shall procure an extension of the validity of the bank guarantee.

15.3.2 The Operator shall, after commencement of work under this Clause, present to the Authority bills for payment in respect of the works and services in progress or completed works and services, as the case may be, supported by such Documentation as is reasonably sufficient for the Authority to determine the accuracy thereof. Within 30 (thirty) days of receipt of such bills, the Authority shall disburse to the Operator such amounts and after making a proportionate deduction for the advance payment made hereunder. In the event of any Dispute, final adjustments thereto shall be made under and in accordance with the Dispute Resolution Procedure.

15.3.3 Notwithstanding anything to the contrary contained in Clause 15.3.1 and 15.3.2, all costs arising out of any Change of Scope Order, other than those agreed as a part of the Change of Scope Order, shall be borne by the Operator.

15.4 Restrictions on certain works

15.4.1 Notwithstanding anything to the contrary contained in this Article 15, the Authority shall not require the Operator to undertake any works or services if such works or services are likely to delay the procurement and deployment of the Buses in accordance with the requirements of this Agreement; provided that in the event that the Authority considers such works or services to be essential, it may issue a Change of Scope Order, subject to the condition that the works forming part of or affected by such Change of Scope Order shall not be taken into account for purposes of determining completion of the Maintenance Depot.

15.4.2 Notwithstanding anything to the contrary contained in this Article 15, the cumulative costs relating to all Change of Scope Orders for provision of works and services shall not exceed 5% (five percent) of the Total Project Cost during the Concession Period.

15.4.3 Notwithstanding anything to the contrary, unless the Parties agree otherwise,

the Authority shall not require the Operator to undertake any Change of Scope which involves upgradation of batteries used in the Buses due to technological advancements in battery chemistry.

Article 16 OPERATION OF BUSES

16.1 Operations of Buses

16.1.1 The Operator shall make available and Operate and Maintain the Buses in accordance with the provisions of this Agreement, including without limitation, the Deployment Plan, and shall comply with the operation and maintenance requirements as provided in Schedule-I of this Agreement.

16.1.2 The Operator shall be fully responsible for ensuring the safety and security of the Buses at all times, including during operations and while the Buses are at the Maintenance Depot. In the event the Operator fails to ensure the security of the Buses and there is any theft of or damage to the Bus or any component of the Bus including but not limited to any component, spare parts, hardware, software, instruments etc., the Operator shall, as soon as is reasonably practical, repair or replace, as the case may be, such Bus or Bus component, spare, parts, hardware, software, instrument(s) etc. of the same or equivalent quality and specification, after giving prior written notice to the Authority.

16.1.3 Upon successful completion of the Concession Period, the operator retains the ownership of the buses under the Concession agreement and the Authority shall claim no right to transfer of ownership of such buses.

16.2 Maintenance Depot

16.2.1 The Operator shall use the Maintenance Depot, only for the purposes of the Operations and Maintenance of the Buses and any other activity specified in this Agreement.

16.2.2 The Operator shall ensure that the Ensure that maintenance depot are adequately staffed with skilled personnel - including representation of women personnel, equipped with requisite equipment, plant and machinery and stocked with Consumables, so as to ensure compliance with the Operations and Maintenance standards provided in this Agreement.

16.3 Operation Manual

16.3.1 The Operator shall prepare an operation manual (the “Operation Manual”) for the operation of Buses in conformity with Good Industry Practice and the provisions of this Article 16. The Operator shall provide 10 (ten) copies of a provisional operation manual (the “Provisional Operation Manual”) to the Authority no later than the date on which the Prototype is delivered pursuant to Clause 13.6. The Authority may review the Provisional Operation Manual and convey its comments to the Operator within a period of 15 (fifteen) days from the date of receipt thereof. The Operator shall thereafter revise the Provisional Operation Manual, as may be necessary, and provide 10 (ten) copies of the Operation Manual, accompanied by an electronic copy thereof, no later than the 15 (fifteen) days from the date on which it receives any comments from the Authority. The Operation Manual shall be revised and updated once every year and the provisions of this Clause 16.3 shall apply,

mutatis mutandis, to such revision. For the avoidance of doubt, the Authority and the Operator expressly agree that until the Operation Manual is provided hereunder, the Provisional Operation Manual shall apply.

16.3.2 The Operation Manual shall interalia include the following:

(a) instructions to operating staff for operation of the Bus;
(b) instructions for troubleshooting the Buses, including any software incorporated in the Buses;
(c) dos and don'ts for operating staff;
(d) safety precautions to be taken by the operating staff;
(e) rating and layout of equipment;
(f) operating limits of installed systems; and
(g) control and safety features of the Buses.
(h) Instructions for operating staff on response and referral of public grievances/complaints to concerned authorities
(i) Protocols for operating staff to manage emergency situation (emergency preparedness- first aid, emergency evacuation, etc.)

16.4 Routes and Schedules

16.4.1 The Parties agree that the Authority shall have the exclusive right to determine routes, frequency and schedule of the Buses as part of Deployment Plan throughout the Concession Period. The Authority shall provide the routes to the Operator for operation of the Buses as specified in Schedule-J (the "Deployment Plan"). All Operational Routes will be such that their origin, destination and opportunity charging location is one or more Maintenance Depot allocated to the Operator as per Schedule-A.

16.4.2 The Authority shall be required to consult with the Operator in case it carries out a change to any Operational Route, provided the Authority shall have no obligation to accept or be bound by any suggestions made by the Operator as part of such consultation. Notwithstanding anything to the contrary, the Authority agrees that any revised Operational Route shall only have an origin, final destination and opportunity charging location at one of the Maintenance Depot or an Opportunity Charging Station allocated to the Operator as per Schedule-A. The Operator shall only ply Buses on the Operational Routes, unless directed otherwise by the Authority. For the avoidance of doubt, it is clarified that the Authority may amend the Operational Routes by providing at least 5 (five) days prior notice to the Operator under and in accordance with the provisions of this Agreement. Provided further that if the Authority changes any Operational Routes pursuant to this Clause 16.4.2, there shall be no reduction in the Monthly Assured Bus Kilometers.

16.4.3 Subject to the requirements set out in Clause 16.4.2 and this Clause 16.4.3, the Authority may change an Operational Route any number of times.

16.4.4 Subject to Clause 16.4.3, the Authority may, after providing notice to the

Operator, change the Operational Route(s)/ frequency/ schedule of the Buses due to any reason whatsoever including but not limited to passenger feedback, special circumstances, festivals and seasonal requirements. In case the Authority makes any such change(s), it shall notify the Operator in writing 5 (five) days prior to required implementation of such change. Provided however, that any given time during the Concession Period, all Operational Routes must have an origin, destination and opportunity charging location at one of the Maintenance Depot as per Schedule-A.

16.4.5 Unless directed by the Authority, the Operator shall maintain the frequency of the Buses as specified in the Deployment Plan.

16.4.6 The actual hours of operations for each Bus in a day shall be specified by the Authority in the Deployment Plan. The Parties agree that the hours of operation may be segregated into peak hours and off-peak hours of operation.

16.4.7 In the event there is a need for change in the Operational Route of a Bus, the Operator shall inform the control centre established by the Authority for monitoring of all activities ("**Control Centre**") and the same shall be tallied with the change in route length measured by the Intelligent Transit Management Systems ("**ITMS**") installed by the Operator or the odometer reading at the end point of the route and the distance so measured shall be reckoned for the purpose of making payment to the Operator.

16.4.8 Notwithstanding anything contained in Clause 16.4, if the Authority wishes to deploy a Bus on any route which requires the Bus to undergo opportunity charging at a location that is not a Maintenance Depot as per Schedule-A ("Opportunity Charging Stations"), then the Authority shall, at its cost, be responsible to provide the Operator:

(a) Sufficient vacant land/space under the ownership of the Authority and with obstacle free right of way to such location on which the Operator will be required to install the charging infrastructure;
(b) an electricity connection to such location (at the available HT metering level, which for the avoidance of doubt may be a 11/22/33/66 kV connection) and sub-station (if required) up to 415 V ; and
(c) any and all Applicable Permits that might be required for installing and operating the charging infrastructure at such location.

Any deployment of Buses undertaken pursuant to this Clause 16.4.8, as well as payment of the cost of any additional charging infrastructure installed by the Operator, shall be undertaken by way of a Change of Scope in accordance with Article 15.

16.5 Deployment Plan

16.5.1 The Authority shall develop a Deployment Plan according to which the Operator shall operate the Buses. The parameters to be included in the Deployment Plan are set out in Schedule-J and shall include:

i. details of the Operational Routes;
ii. schedules of the Buses (including description of Bus Stops); and
iii. frequency and schedule providing Bus headways, based on-peak and off-peak hours.

16.5.2 A Deployment Plan shall be submitted to the Operator in accordance with the timelines set out in Clause 4.1.2. Within 15 (fifteen) days from the date of submission of the Deployment Plan by the Authority, the Operator shall review and provide comments, if any, on the draft Deployment Plan. The Parties expressly agree and acknowledge that any comments provided by the Operator on the Deployment Plan shall be solely from the perspective of ensuring compliance with the terms of this Agreement. The Authority may, in its sole discretion, incorporate any of the Operator's comments and submit a revised Deployment Plan within 15 (fifteen) days from the date on which it receives comments from the Operator. Any dispute between the Parties on the Deployment Plan shall be settled in accordance with the Dispute Resolution Procedure.

16.5.3 The Operator shall operate the Buses in accordance with the Deployment Plan finalised pursuant to Clause 16.5.2 and shall at all times ensure that the required routes and frequency of Buses is maintained as specified under the Deployment Plan or as per the instructions of the Authority issued from time to time.

16.5.4 The Operator shall ply the Buses in accordance with the Deployment Plan.

16.5.5 Subject to Clause 16.48, the Authority reserves the right to make changes to the Deployment Plan from time to time with prior notification, of at least 5 (five) days, of such change to the Operator. The Parties agree that changes to the Deployment Plan by the Authority shall not have an effect of exceeding 20% (twenty percent) of the Total Scheduled Bus Kilometers as mentioned in the Deployment Plan.

16.5.6 If, pursuant to any revisions in the Deployment Plan under Clause 16.5.5, the Operator is of the view that it will be unable to meet any of the Key Performance Indicators set out in Article 20, it shall issue a notice to the Authority setting out in detail its reasons. The Operator shall provide all necessary documentation and data in support of its claim. Upon such a notice being issued, the Parties shall discuss in good faith with a view to agreeing on such revisions to the Deployment Plan as may be necessary while ensuring that the Operator is not unduly prevented from achieving the Key Performance Indicators. Any dispute between the Parties on any revisions to the Deployment Plan shall be settled in accordance with the Dispute Resolution Procedure.

16.5.7 If, based on the operations of the Buses and the data collected from the ITS, there are delays in completing Bus trips for a continuous period of 1 (one) month, and such delays are not a result of a breach by the Operator of its obligations under this Agreement, the Authority may, in its sole discretion, review and revise the Deployment Plan with a view making such changes

as may be required in order to eliminate such delays.

16.5.8 Notwithstanding anything to the contrary contained herein, the Parties agree that any amendment to the Operational Routes or the Deployment Plan shall not reduce the Monthly Assured Bus Kilometers and the Operator shall continue to be paid the Fee calculated in accordance with Article 22.

16.6 Incidents En-Route

16.6.1 In case of a Breakdown of a Bus during normal course of Operations, the Operator shall immediately inform the Control Centre and its maintenance team whereupon the Operator shall ensure speedy tow-away of the affected Bus within 1 (one) hour of the Breakdown. The Operator shall as soon as is reasonable practicable, provide a replacement Bus to complete the route after such breakdown, or shall transfer all (or as many as capacity permits) Users to the next Bus plying on the same Operational Route in order to minimise inconvenience to the Users, failing which it will be deemed as an Operator Default and the Operator shall be liable to pay Damages of 20 kms deduction per instance. In case bus is not repaired or towed away from the break down spot within a period of 1 (one) hour, Operator shall be liable to pay additional damages of deduction of 20 kms per each additional hour.

16.6.2 The Operator shall ensure regular communication with Buses throughout the Operation Period by making use of relevant technology as specified in this Agreement, more specifically provided in Clause 19.7.

16.6.3 In an unforeseen event involving unruly behaviour by passengers or sexual harassment or vandalism in or involving the Bus, the Operator shall forthwith intimate the Authority. In the event of a complaint of a woman, the bus driver must immediately drive the vehicle to the nearest police station. If the Bus in question is not in a condition to complete the Operational Route or go back to the Bus Depot, then the Operator shall arrange to tow-away such Bus within 1 (one) to 3 (three) hours of such occurrence, failing which Operator shall be liable to pay Damages of 20 kms deduction for each such incident. The Operator shall, provide a replacement Bus to complete the route after such incident or shall transfer all (or as many as capacity permits) Users to the next Bus plying on the same Operational Route in order to minimize inconvenience to the Users.

16.6.4 The Operator shall make provisions for the adequate availability of first aid kits on the Buses or at the Maintenance Depots for assisting any persons or Users in need of first aid on-site and shall also co-ordinate with the relevant Government Instrumentalities including but not limited to the police to ensure timely medical help to any injured Users. The operator shall maintain in each bus a list of emergency nos. and details of nearest hospitals, fire brigade, police stations and one-stop-crisis centres (if available) for immediate referrals.

16.6.5 The Operator shall extend all cooperation requested by the Authority including but not limited to filing complaints to the police and or any other investigation undertaken in relation to any incidents on the Buses.

16.7 Advertising on Buses and Maintenance Depots

16.7.1 Subject to Applicable Law, the Authority may display advertisements on the Buses and at the Maintenance Depot. Other than to the extent set out in this Agreement, the Operator shall have no right to display any advertisement on the Buses or the Maintenance Depot.

16.7.2 The Authority shall ensure that the display of any advertisements on the Buses and Maintenance Depot does not interfere in any way with the performance by the Operator of its obligations under this Agreement.

16.7.3 The Authority shall at all times ensure that no part of the Buses including but not limited to the external and internal colour, body of the Buses or any part of the Maintenance Depot are damaged due to the placement of any advertisements or any other form of display material. The Authority shall ensure that the advertisements are displayed in such a manner that it does not obstruct partially or completely, the visibility from inside and outside of the Buses. If any damage is caused to the Buses or the Maintenance Depot directly as a result of the placement of any advertisements by the Authority, the Authority shall be liable to reimburse the Operator all costs incurred by the Operator in rectifying such damage.

16.7.4 Placement of Advertisement

a. The Authority may place the advertisement inside and outside the Buses at designated slots ascribed , such that it does not obstruct any safety, advisory or other mandatory information.
b. The Authority may place the advertisement on the boundary wall of the Maintenance Depot or any other slot identified by the Authority.

16.7.5 The Authority shall be entitled to appropriate the entire revenue generated from the display of advertisements on the Buses and at the Maintenance Depot.

16.8 User Fare

16.8.1 On and from the Lot COD of the first Lot of Buses till the Transfer Date, the Authority or a third party nominated by the Authority ("Authority Nominated Personnel") shall have the right to demand, collect and appropriate User Fare from the Users in accordance with this Agreement.

16.8.2 The Authority or Authority Nominated Personnel shall, in accordance with Clause 16.8.1 above, provide conductors for collection of the User Fare, every day prior to commencement of operations for the day, at the Maintenance Depot and on the time decided by the Authority. In the event the conductor does not report on time (with a relaxation of up to 5 minutes) or remains absent, the Operator shall promptly inform the Authority's Representative, who shall provide a replacement promptly.

16.8.3 The Operator acknowledges and agrees that upon payment of User Fare to the Authority or the Authority Nominated Personnel, any User shall be entitled to use the Buses and the Operator shall not place, or cause to be

placed, any restriction on such use, except to the extent specified in any Applicable Law, Applicable Permits or the provisions of this Agreement. It is clarified that the Authority or Authority Nominated Personnel shall collect User Fare from passengers prior to boarding the Bus and the Authority shall have the right to refuse entry to passengers refusing payment of the User Fare.

16.8.4 The Operator and its employees shall always extend courtesy while interacting with public.

Article 17 MAINTENANCE OF BUSES

17.1 Maintenance Obligations

17.1.1 The Operator shall maintain all Buses in accordance with the provisions of this Article 17, the Specifications and Standards, the Maintenance Manual and the Maintenance Requirements (the "Maintenance Obligations").

17.1.2 The Parties agree that for discharging the Maintenance Obligations hereunder, the Operator shall provide its staff, movable equipment, spares and consumables, workshop, office space etc. The Parties further agree that the workshop space to be provided hereunder by the Operator for discharging the Maintenance Obligations of the Operator shall be no less than 100 m (hundred metres) long and 20 m (twenty metres) wide, within the Maintenance Depot.

17.2 Maintenance Manual

17.2.1 The Operator shall prepare a repair and maintenance manual (the "Maintenance Manual") for the maintenance of Buses in conformity with Good Industry Practice and the provisions of this Article 17. The Operator shall provide 10 (ten) copies of a provisional maintenance manual (the "Provisional Maintenance Manual") to the Authority no later than 90 (ninety) days from the Appointed Date. The Authority may review the Provisional Maintenance Manual and convey its comments to the Operator within a period of 15 (fifteen) days from the date of receipt thereof. The Operator shall revise the Provisional Maintenance Manual, as may be necessary, and provide to the Authority 50 (fifty) copies of the Maintenance Manual, accompanied by an electronic copy thereof, no later than 30 (thirty) days from the date on which it receives comments from the Authority. The Maintenance Manual shall be revised and updated once every year and the provisions of this Clause 17.2 shall apply, *mutatis mutandis*, to such revision. For the avoidance of doubt, the Parties expressly agree that until the Maintenance Manual is provided hereunder, the Provisional Maintenance Manual shall apply.

17.2.2 The Maintenance Manual shall include details of the periodic intervals at which the Operator will perform its Maintenance Obligations on each Bus ("**Scheduled Maintenance**"). The Operator shall ordinarily undertake Scheduled Maintenance at the Maintenance Depots and shall ensure that the Maintenance Depots are fully equipped with all equipment, tools, tackles, Consumables and Spares required to undertake the Scheduled Maintenance of the Buses.

17.2.3 The Operator shall, at least 15 (fifteen) days prior to the date of any Scheduled Maintenance issue a notice to the Authority identifying the Buses that will undergo such Scheduled Maintenance. Such notice shall also specify the estimated time required for such Scheduled Maintenance and the estimated date on which such Buses will be made available for operations.

17.2.4 Any maintenance or repair of a Bus, not being Scheduled Maintenance, and arising out of any reason including Breakdown, unsatisfactory performance, defects, deficiencies, accident, vandalism, natural calamity, fire, riots, arson or negligence, shall be undertaken by the Operator as unscheduled maintenance (the "**Unscheduled Maintenance**"). The Parties expressly agree that any and all Unscheduled Maintenance shall be undertaken promptly to procure efficient, safe and reliable operation of the relevant Bus. Any and all Unscheduled Maintenance shall form part of the Maintenance Obligations and shall be undertaken by the Operator at its own cost and expense. Nothing on account of Unscheduled Maintenance must affect the total number of buses in operation as per the terms of the Agreement.

17.2.5 The Operator shall, within 3 (three) days of the arrival of a Bus at a Maintenance Depot for Unscheduled Maintenance arising out of the reasons specified in Clause 17.2.4, furnish to the Authority in reasonable detail the particulars of defects, deficiencies or damages.

17.3 Spares and Consumables

17.3.1 During the Concession Period, the Operator shall, at its own cost and expense, replace and install materials which get consumed or wear out beyond serviceable limits in the normal course of operation of a Bus, including tyres, tubes, oils, lubricants, brake blocks and pads, rubber parts and hoses, fuses, light fittings, bulbs, seats, curtains, filters, look out glass, bearings and insulators (the "Consumables"). Save and except as provided in this Agreement, the Consumables shall be replaced or installed, as the case may be, by the Operator when a Bus is brought to a Maintenance Depot in accordance with the provisions of this Agreement.

17.3.2 During the Maintenance Period, the Operator shall, at its own cost and expense, replace any part or equipment of a Bus which may be defective, damaged or worn out, by a substitute thereof (the "**Spares**") for the efficient Operation and Maintenance of a Bus.

17.3.3 The Parties expressly agree that the Operator shall, supply and install doors, window panes, seats, axle-boxes, brake components, wind shield, and under-transmission piping/cabling at its own cost and expense; provided, however, that if such supply and installation have arisen on account of negligence of Authority staff, accidents, vandalism, arson, riots or natural calamities, the Authority shall be liable for the costs and expenses incurred by the Operator as a result less any amount recovered from the Insurance Cover maintained by the Operator.

17.3.4 The Operator shall, at its cost, maintain a sufficient inventory of Consumables and Spares for timely repair and maintenance of Buses in conformity with its Maintenance Obligations.

17.4 Maintenance Requirements

The Operator shall procure that at all times during the Concession Period, each and every Bus conforms to the maintenance requirements set forth in

Schedule-I (the "**Operation and Maintenance Requirements**").

17.5 Damages for breach of Maintenance Obligations

17.5.1 In the event that the Operator fails to repair or rectify any defect or deficiency in a Bus, as set forth in the Maintenance Requirements and within the period specified therein, it shall be deemed to be in breach of this Agreement and the Authority shall be entitled to recover Damages, to be calculated and paid for each day of delay until the breach is cured, at the rate of INR 2,500 (Rupees Twenty Five Hundred) per bus. Recovery of such Damages shall be without prejudice to the rights of the Authority under this Agreement, including the right of Termination thereof.

17.5.2 The Damages set forth in Clause 17.5.1 may be assessed and specified forthwith by the Authority; provided that the Authority may, in its discretion, demand a smaller sum as Damages, if in its opinion, the breach has been cured promptly and the Operator is otherwise in compliance with its Maintenance Obligations. The Operator shall pay such Damages forthwith and, in the event, that it contests such Damages, the Dispute Resolution Procedure shall apply.

17.6 Demobilisation due to Emergency

17.6.1 If in the reasonable opinion of the Authority, there exists an Emergency which warrants the demobilisation of a Bus, the Authority shall be entitled to demobilise the Bus for so long as such Emergency and the consequences thereof warrant; provided that such demobilisation and particulars thereof shall be notified by the Authority to the Operator without any delay, and the Operator shall diligently carry out and abide by any reasonable directions that the Authority may give for dealing with such Emergency.

17.6.2 The Operator shall re-mobilise the Bus as quickly as practicable after the circumstances leading to its demobilisation have ceased to exist or have so abated as to enable the Operator to re- mobilise the Bus and shall notify the Authority of the same without any delay. For the avoidance of doubt, the demobilisation of any Bus pursuant to this Clause
17.6 shall not affect the Monthly Assured Bus Kilometers and the Authority shall continue to pay the Fee to the Operator in accordance with Article 22.

17.7 Authority's right to take remedial measures

In the event the Operator does not maintain and/or repair the Bus in conformity with the provisions of this Agreement and the Maintenance Manual, and fails to commence remedial works within 15 (fifteen) days of receipt of a notice in this regard from the Authority, the Authority shall, without prejudice to its rights under this Agreement including Termination thereof, be entitled to undertake such remedial measures at the risk and cost of the Operator, and to recover its cost from the Operator. In addition to recovery of the aforesaid cost, a sum equal to 20% (twenty per cent) of such cost shall be paid by the Operator to the Authority as Damages. The Parties agree that the Authority shall not in any manner be liable for any

damage to, or deterioration in, a Bus occurring on account of the remedial measures taken hereunder.

17.8 Overriding powers of the Authority

17.8.1 If in the reasonable opinion of the Authority, the Operator is in material breach of its obligations under this Agreement and, in particular, the Maintenance Obligations, and such breach is causing or is likely to cause material hardship to the Users or render the use of a Bus unsafe for operation, the Authority may, without prejudice to any of its rights under this Agreement, by notice, require the Operator to take reasonable measures immediately for rectifying or removing such hardship or unsafe condition, as the case may be.

17.8.2 In the event that the Operator, upon notice under the provisions of this Clause 17.8, fails to rectify or remove any hardship or unsafe condition affecting the operation of any Bus, within 15 (fifteen) days from the date of the notice, the Authority may exercise overriding powers under this Clause 17.8 and take over the performance of any or all the obligations of the Operator to the extent deemed necessary by it for rectifying or removing such hardship or unsafe situation; provided that the exercise of such overriding powers by the Authority shall be of no greater scope and of no longer duration than is reasonably required hereunder; provided further that for any costs and expenses incurred by the Authority in discharge of such obligations, the Authority shall be entitled to recover them from the Operator in accordance with the provisions of Clause 17.7 along with the Damages specified therein.

17.8.3 In the event of a national emergency, adverse weather conditions, civil commotion or any such other event, the Authority may take over the performance of any or all the rights or obligations of the Operator to the extent deemed necessary by it, and exercise such control over the Buses and Maintenance Depots or give such directions to the Operator as may be deemed necessary; provided that the exercise of such overriding powers by the Authority shall be of no greater scope and of no longer duration than is reasonably required in the circumstances which caused the exercise of such overriding power by the Authority. It is agreed that the Operator shall comply with such instructions as the Authority may issue in pursuance of the provisions of this Clause 17.8, and shall provide assistance and cooperation to the Authority, on a best effort basis, for performance of its obligations hereunder.

17.8.4 The Parties agree that if the Authority takes over the performance of any or all the rights or obligations of the Operator pursuant to Clauses 17.8.1, 17.8.2 or 17.8.3, then:

(a) the period during which the Authority has taken over the operation of the Buses shall be excluded for determining compliance with the Key Performance Indicators in accordance with Article 20;

(b) the Authority shall continue to pay the Operator for the Monthly Assured Bus Kilometres in accordance with Clause 22.4 for the period during which the Authority has taken over the operation of the Buses; and

(c) the Authority shall be liable for any damage caused to the Buses during the period in which it has taken over the operations of the Buses.

17.9 Restoration of loss or damage to the Buses

Save and except as otherwise expressly provided in this Agreement, in the event that a Bus or any part thereof suffers any loss or damage during the Concession Period from any cause whatsoever, the Operator shall, at its cost and expense, rectify and remedy such loss or damage forthwith so that the Bus conforms to the provisions of this Agreement.

17.10 Modifications to the Buses

The Operator shall not carry out any material modifications to a Bus save and except where such modifications are necessary for the Bus to operate in conformity with the Specifications and Standards, Maintenance Obligations, Good Industry Practice and Applicable Laws; provided that the Operator shall notify the Authority of the proposed modifications along with particulars thereof at least 15 (fifteen) days before commencing work on such modifications and shall reasonably consider any suggestions that the Authority may make within 15 (fifteen) days of receiving the Operator's proposal. For the avoidance of doubt, all modifications made hereunder shall comply with the Specifications and Standards, Applicable Laws, Good Industry Practice and the provisions of this Agreement.

17.11 Operation Assistance

17.11.1 The Operator shall operate the Buses in accordance with the Operation Manual, Applicable Laws, Good Industry Practice and the provisions of this Agreement.

17.11.2 The Operator shall ensure that its staff are familiar and well versed with the Operation Manual.

17.11.3 The Operator shall bear the cost of electricity, including over and above the Allowed Energy Consumption, in accordance with Schedule-S.

17.12 Excuse from performance of obligations

The Operator shall not be considered in breach of its obligations under this Agreement in connection with the Operations and Maintenance of the Buses and Maintenance Depots if it is unable to perform its obligations on account of any of the following:

(a) an event of Force Majeure;

(b) measures taken to ensure the safe operation of Buses, except when unsafe conditions occurred because of failure of the Operator to perform its obligations under this Agreement; or

(c) a breach by the Authority of its obligations under this Agreement

and which directly affects the Operator's ability to comply with any of its obligations;

(d) delay by the Authority in handing over the Maintenance Depots by the Scheduled Maintenance Depot Handover Dates in accordance with the terms of this Agreement;

(e) any road accidents which prevent the Operator from complying with the requirements of this Agreement, including the Key Performance Indicators, provided that the Operator has complied with the notice requirements set out in Clause 13.11.4 and that such accidents were not caused due to reasons attributable to the Operator;

(f) grid failures, power outages or inadequate power supply to the extent it affects the Operator's ability to adequately charge the Buses in accordance with the requirements prescribed in the Operations Manual;

(g) blockade on any Operational Route caused by any Government Instrumentality or other reasons not attributable to the Operator;

(h) compliance with a request from the Authority or the directions of any Government Instrumentality.

Provided that, any such inability to comply with its obligations shall be notified by the Operator to the Authority without any delay. Notwithstanding the foregoing, the Operator shall keep every unaffected Bus available for operations. Further, the Operator shall, in the event that it is prevented from performing any time-bound obligation in connection with the Operations and Maintenance of the Buses and Maintenance Depots on account of any of the events set out in this Clause 17.12, receive an extension of time for the performance of such obligation with the period of such extension being equal to the period during which any of the events set out in this Clause 17.12 subsist.

17.13 Warranties for defects and deficiencies

17.13.1 The Operator warrants that:

(a) all equipment, supplies, plant and machinery at the Maintenance Depots as well as components, parts and systems forming part of a complete Bus including the Spares and Consumables shall be new and of utility-grade quality and in full conformity with the Specifications and Standards, Designs and Drawings,Applicable Permits, Applicable Laws and the other requirements of the Agreement, of suitable quality and fit for the purpose for which they are intended and be free from defects, deficiencies and defective workmanship;

(b) all Buses shall be free from defects, shall comply with all Applicable Laws and Good Industry Practice and will be capable of operating in the manner intended and contemplated in the Specifications and Standards, Designs and Drawings, Applicable Permits, Applicable Laws and the Agreement;

(c) the manufacturing, assembly and supply of the Buses shall be performed in accordance with the standards of professional care, skill, diligence and competence generally accepted in the international independent manufacturing industry applicable to engineering and manufacturing and project management practices for manufacturing projects of similar size and type as the Project, when operated in accordance with Good Industry Practice; and

(d) the Buses shall be capable of performing and would continue to perform as per this Agreement.

17.14 Maintenance Depots

17.14.1 For discharging its Maintenance Obligations under and in accordance with the provisions of this Agreement, the Operator shall also operate and maintain the Maintenance Depots in accordance with the Specifications and Standards, Good Industry Practices and the provisions of this Agreement.

17.14.2 Subject to adequate space being made available at the Maintenance Depots by the Authority, the Maintenance Depots shall have adequate repair and maintenance facilities for the entire fleet of Buses as well as parking facility for the entire fleet of Buses deployed at such depot.

Article 18 SAFETY REQUIREMENTS

18.1 Safety Requirements

The Operator shall develop, implement and administer a safety programme for providing a safe environment on or about the Buses and Maintenance Depot, and shall comply with the safety requirements set forth in this Article 18 and Schedule-K (the "**Safety Requirements**") and Schedule AB.

18.2 Guiding principles

18.2.1 Safety Requirements aim at minimising threat of injuries, loss of human life and damage to property resulting from accidents on account of the Buses or in the Maintenance Depot, irrespective of the person(s) at fault. The operators will adopt ensuring women's safety - including women staff and commuters - as a key guiding principle

18.2.2 Safety Requirements shall apply to all phases of construction, operation and maintenance of the Project with emphasis on identification of factors associated with accidents, consideration of the same and implementation of appropriate remedial measures.

18.3 Obligations of the Operator

18.3.1 The Operator shall abide by the following to ensure safety of the Buses and Maintenance Depot, human life and property:

(a) instructions issued by the Authority;
(b) Applicable Laws and Applicable Permits;
(c) provisions of this Agreement;
(d) relevant standards/guidelines contained in internationally accepted codes; and
(e) Good Industry Practice.
(f) Develop a Standard Operating Procedure (including for events involving thermal incidents) and train the relevant staff on the Standard Operating Procedure
(g) Conducting annual safety audit and submission of the report to the Authority
(h) Consultation with relevant stakeholders during the design stage
(i) Conduct the capacity building training of the relevant staff

18.3.2 The Operator shall impart safety training to its employees and shall at all times be responsible for observance of safety procedures by its staff, Contractors and agents.

18.3.3 The Operator shall be responsible for undertaking all the measures under its control to ensure safe operation of Buses and the safety and security of the Maintenance Depot.

18.3.4 The Operator agrees that the Authority shall be entitled to inspect any Bus or Maintenance Depot to verify adherence to Safety Requirements and the Operator shall be obliged to facilitate such inspection and implement the corrective measures identified in such inspection.

18.3.5 The Operator shall undertake annual women safety audit based on a standardized and quantified methodology to evaluate women safety and security concerns in bus routes, buses and Maintenance Depot, and provide recommendation to reduce the risk of violence against women and girls.

18.4 Safety measures during Fit Out Works

The Operator shall, while undertaking the Fit Out Works at the Maintenance Depot, provide an environment for procuring the safety of human life and property in accordance with Applicable Laws and Good Industry Practice

18.5 Annual Safety Report

18.5.1 The Operator shall submit to the Authority before the 31st (thirty first) May of each Accounting Year, an annual report in 10 (ten) copies containing, without limitation, a detailed listing and analysis of all accidents occurring on account of the operation of the Buses or in the Maintenance Depot during the preceding Accounting Year and the measures taken by the Operator for averting or minimizing such accidents in the future ("Annual Safety Report").

18.5.2 Once in every Accounting Year, a safety audit shall be carried out by the Authority. It shall review and analyse the Annual Safety Report and accident data of the preceding Accounting Year and undertake an inspection of the Buses and Maintenance Depot. The Authority shall provide a safety report recommending specific improvements, if any, required to be made in the Buses and Maintenance Depot. Such recommendations shall be implemented by the Operator in accordance with Safety Requirements, Specifications and Standards and Applicable Laws.

Article 19 MONITORING OF OPERATION AND MAINTENANCE

19.1 Monthly Status Reports

19.1.1 During the Concession Period, the Operator shall, no later than 7 (seven) days after the end of each month, furnish to the Authority a monthly report stating in reasonable detail the maintenance services performed by the Operator on the Buses and the defects and deficiencies that require rectification (standard format as per schedule X). The report shall also include Key Performance Indicators achieved by the Buses, the compliance or otherwise with the Maintenance Requirements, Maintenance Manual and Operation Manual, details of any breakdowns, claims, challans etc. The Operator shall promptly give such other relevant information as may be required by the Authority.

19.1.2 The monthly report specified in Clause 19.1.1 shall also include a summary of the key operational hurdles and deliverables expected in the succeeding month along with strategies for addressing the same and for otherwise improving the Operator's operational performance.

19.1.3 The operator shall log all the maintenance activities (Scheduled, Unscheduled) for every Bus throughout the Concession Period in the maintenance history register which shall be accessible to the Authority as and when required.

19.2 Accident Reporting

The Operator shall, prior to the close of each day, send to the Authority, by facsimile or email, a report containing details of any failures, accidents and other unusual occurrences relating to the Buses. A weekly and monthly summary of such reports shall also be sent within 3 (three) days of the closing of each week and month, as the case may be. For the purposes of this Clause 19.2, unusual occurrences on a Bus shall include any other troubles or events involving a Bus during operations. Further, the report shall include indicators on women safety interalia, number of incidents of sexual harassment or abuse reported or referred through relevant helpline or complaint register maintained in buses, percentage of women users perceive bus services to be safe (source-women safety audit).

19.3 Inspection

The Authority shall be entitled to inspect the Buses and Maintenance Depot after any maintenance activities have been carried out by the Operator for evaluating the compliance of the Buses and Maintenance Depot with the Maintenance Obligations. Pursuant to any such inspections, the Authority shall prepare a report of such inspection (the "Maintenance Inspection Report") stating in reasonable detail the defects or deficiencies, if any, with particular reference to the The inspection shall interalia include compliance with Environment Social Health and Safety requirements provided under Schedule AB.

19.4 Tests

For determining that the Buses are being maintained in conformity with the Maintenance Obligations, the Authority may require the Operator to carry out, or cause to be carried out, the tests specified by it in accordance with Good Industry Practice. The Operator shall, with due diligence, carry out or cause to be carried out all such tests in accordance with the instructions of the Authority and furnish the results of such tests to the Authority within 15 (fifteen) days of such tests being conducted. One half of the costs incurred on such tests shall be reimbursed by the Authority to the Operator. Provided, however, that the Authority shall not bear any costs hereunder for and in respect of tests which have failed. Provided that, the date and time of such tests shall be mutually discussed and agreed by the Parties keeping in mind the operation hours of any such Bus as per the Deployment Plan.

19.5 Remedial measures

19.5.1 The Authority shall require the Operator to carry out or cause to be carried out tests, at the cost of the Operator, to determine whether the remedial measures have brought the Buses into compliance with the Maintenance Obligations and Safety Requirements, and the procedure set forth in this Clause 19.5 shall be repeated until the maintenance of Buses conforms to the Maintenance Obligations and Safety Requirements. In the event that remedial measures are not completed by the Operator in conformity with the provisions of this Agreement, the Authority shall be entitled to recover Damages from the Operator at the rate of INR 2,500 (Rupees Twenty Five Hundred) per bus times the number of buses allocated to the specific depot.

19.6 Responsibility of the Operator

19.6.1 It is expressly agreed between the Authority and the Operator that any inspection carried out by the Authority or the submission of any Maintenance Inspection Report by the Authority as per the provisions of this Article 19 shall not relieve or absolve the Operator of its obligations and liabilities hereunder in any manner whatsoever.

19.6.2 It is further agreed that the Operator shall be solely responsible for adherence to the Key Performance Indicators specified in Article 20.

19.7 Real Time Data Access

The Operator shall ensure that the Bus deployed has real time data monitoring device in accordance with the Standards and Specifications in Schedule- P (“Intelligent Transit System”, “ITS”) complete with onboard devices on Buses which enable the Authority to monitor the real-time location and status of the Buses. The Operator shall provide the Authority access to the raw feed of the ITS. The Operator shall install the ITS to provide the data as per the data standards and communication protocols specified in Schedule -P. The Operator shall ensure integration of the data feed from ITS devices to the ITMS Platform. The Operator agrees that a failure to comply with its obligations under this Clause 19.7 shall be deemed to be an Operator Default.

Article 20 KEY PERFORMANCE INDICATORS

20.1 Key Performance Indicators

20.1.1 Without prejudice to the obligations specified in this Agreement, the Operator shall operate and maintain every Bus such that it achieves the performance indicators comprising Reliability, Operational Availability, Start Punctuality, Arrival Punctuality, Trip Speed, Frequency, Safety, Accessibility, and Infractions as specified in this Article 20, (the "**Key Performance Indicators**").

20.2 Reliability

20.2.1 The Parties agree that the average reliability of all Buses in the fleet shall be measured on a monthly basis in terms of the number of Breakdowns per 10,000 (ten thousand) kilometres travelled by the Buses (the "Breakdown Factor")

20.2.2 Breakdown Factor shall be equal to the quotient of the aggregate number of Breakdowns of all Buses multiplied by 10,000 (ten thousand) and divided by the cumulative distance travelled by all Buses in that month.

$$\text{Breakdown Factor (BF)} = \frac{\text{(total no. of Breakdowns of all buses in a month)}}{\text{Total bus kms operated in a month}} \times 10{,}000$$

20.2.3 The Operator agrees that the Breakdown Factor for the Buses, determined in accordance with Clause 20.2.2, shall be equal to or less than 0.5 (zero decimal five). The Operator agrees that for every increase in the Breakdown Factor by 0.1 (zero decimal one) above 0.5, it shall pay Damages to the Authority at the rate of 0.1% (zero decimal one) of the Monthly Fees.

20.2.4 The Authority agrees that if the Breakdown Factor is less than 0.5 (zero decimal five), then for every 0.1 (zero decimal one) decrease in the Breakdown Factor below a factor of 0.5, the Authority shall pay to the Operator an incentive equal to 0.05% of the Monthly Fees.

20.3 Operational Availability

20.3.1 After Lot COD of each Lot as per the Delivery Schedule, a Bus shall be deemed to be available for operation at all times, save and except for the instances set out in Clause
20.3.2 below.

20.3.2 The Parties agree that the period for which a Bus is deemed to be not available for operation shall be as follows:

a) Bus is not available at the scheduled start of shift(s) turnout time as per the Deployment plan.
b) Bus held up at Maintenance Depot/ workshop for any reason during shift(s) schedule turn out time unless such non availability is on account of reason not directly attributable to Operator such as Bus damaged due to riots, natural calamities, vandalism, traffic jams.

20.3.3 The availability of the Buses shall be calculated on a shift(s) basis by dividing

the number of Buses available for operations in the start of shift(s) as per the scheduled turn out time (as per Clause 20.3.1 and 20.3.2 above) by the total number of Buses contracted by the Authority under this Agreement multiplied by 100 (one hundred" ("**Availability**").

$$\text{Availability} = \frac{\text{Total no. of buses available for operations in the start of shift(s)}}{\text{Total number of buses as per plan}} \times 100$$

20.3.4 The Operator shall at all times ensure that the Availability of the Buses during each month of the Concession Period is equal to 100" ("**Guaranteed Availability**"). To ensure this availability:

a. operator should maintain minimum 2 (two) numbers of spare buses ("Additional Bus") from the date of Lot COD for each lot as per the Delivery schedule.
b. Authority should provide additional space for these Additional Buses

20.3.5 Notwithstanding anything to the contrary contained in this Agreement, upon the occurrence of any of the events mentioned in Clause 17.12, the Buses affected by such events will be deemed to be Available for the duration of the event.

20.3.6 The Operator agrees that for any reduction in the Availability as compared to the Guaranteed Availability, it shall pay Damages to the Authority as per the table below: The Damages payable by the Operator for a failure to meet the Guaranteed Availability shall be payable monthly.

Damages in case of reduction in Guaranteed Availability			
Availability	Less than 100% and up to 95%	less than 95% and up to 90%	Less than 90%
Damages payable per non available Bus	50 bus kms / shift/ non available Bus	60 bus kms/ shift/ non available Bus	70 bus kms/ shift/ non available Bus

20.3.7 The Operator shall make the Buses available at the prescribed locations mentioned in the Deployment Plan along with driver about 15 minutes before the scheduled turn out operation on all days.

20.3.8 Operator shall ensure refurbishment of Buses after 6 years from the date of COD. Refurbishment of buses shall be such that Buses are in best conditions with completion of all missing components, proper working of major aggregates/ assemblies/ sub-assemblies, replacement of damaged body panels, replacement of cushions of passenger seats, flooring, structural members etc. the refurbishment of buses is required to be completed within window of 1 year i.e., before competition of seventh year from the date of COD. During the refurbishment period relaxation in Guaranteed Availability up to 5% (five percent) is allowed. The technical team will inspect the buses before they are put in services after refurbishment of the Bus, if the bus is found not refurbished in near to showroom condition, such Bus will not be permitted for the operations.

20.4 Punctuality

20.4.1 The starting time punctuality of the Buses shall be measured on a monthly basis in terms of the percentage of on-time start of trips (in accordance with the Deployment Plan) to the total number of trips operated on a daily basis in the relevant month ("Start Punctuality"). The total number of trips where a Bus started late (or did not start) during the month compared to the start time as set out in the Deployment Plan will be recorded and subtracted from the total number of trips operated in such month to arrive at the number of trips operated that started on-time as per the Deployment Plan.

20.4.2 The Operator agrees that the arrival punctuality of the Buses at the end destination of the relevant Operational Route shall be measured on a monthly basis in terms of the percentage of trips with on-time arrival at the final destination (in accordance with the Deployment Plan) to the total number of trips operated on a daily basis in such month ("Arrival Punctuality"). The total number of trips where a Bus arrives late at the final destination during the month will be recorded and subtracted from the number of trips operated in such month to arrive at the on- time arrival trips.

20.4.3 With respect to the Start Punctuality, the Parties agree that the Operator may exercise a relaxation up to 5 (five) minutes for the start time of the Bus schedule as set out in the Deployment Plan. With respect to the Arrival Punctuality, the Parties agree that the Operator may exercise a relaxation up to 10% (ten percent) of the total scheduled trip time as set out in the Deployment Plan (subject to a maximum of 15 (fifteen) minutes).

20.4.4 Subject to the provisions of Clause 20.4.3, the Operator agrees that the Start Punctuality determined in accordance with Clause 20.4.2 shall be equal to or more than 90% (ninety percent) in any month ("**Guaranteed Start Punctuality**") and the Arrival Punctuality shall be equal to or more than 80% (eighty percent) in any month ("**Guaranteed Arrival Punctuality**") respectively.

20.4.5 The Operator agrees that for every 1% reduction in the Start Punctuality or the Arrival Punctuality in any month, as the case may be, as compared to the Guaranteed Start Punctuality or the Guaranteed Arrival Punctuality, in each case, for that month, it shall pay Damages to the Authority at the rate of 2% of the Monthly Fees. The Damages payable by the Operator for a failure to achieve the Guaranteed Start Punctuality or the Guaranteed Arrival Punctuality shall be calculated at the end of each month. Provided however, if, based on a verification of the Start Punctuality or the Arrival Punctuality in any month, the Authority determines that the Operator has failed to achieve the Guaranteed Arrival Punctuality directly as a result of a failure to achieve the Guaranteed Start Punctuality, then in order to avoid any double counting of the Damages payable by the Operator, the Authority shall only levy Damages for a failure to achieve one of such Key Performance Indicators.

20.4.6 The Authority agrees that if, in any month, the Start Punctuality or the Arrival Punctuality is more than the Guaranteed Start Punctuality or the Guaranteed Arrival Punctuality for that month respectively, then for every 1% increase in

the Start Punctuality or the Arrival Punctuality over and above the Guaranteed Start Punctuality or the Guaranteed Arrival Punctuality, as the case may be, for that month, the Authority shall pay to the Operator an incentive equal to 0.05% of the Monthly Fees. The incentive (if any) payable by the Authority to the Operator in accordance with this Clause 20.4.6 shall be calculated at the end of each month.

20.5 Frequency

20.5.1 The frequency of operation of all available Buses (as determined in accordance with Clause 20.3 above) shall be measured on a monthly basis in terms of:

(a) a percentage of the cumulative completed trips travelled by all Buses to the aggregate number of scheduled trips for the same time period ("**Trip Frequency**"); and

(b) a percentage of the cumulative Bus Kilometres travelled by all Buses to the aggregate scheduled Bus Kilometres for the same time period ("**Bus Kms Frequency**").

20.5.2 The Operator agrees that the guaranteed Trip Frequency ("Guaranteed Trip Frequency") and the guaranteed Bus Kms Frequency ("Guaranteed Bus Kms Frequency"), as the case may be, determined in accordance with Clause 20.5.1 shall be equal to or more than 94% (ninety four percent).

20.5.3 Unless otherwise set out in the Deployment Plan, the Authority shall provide minimum of 5 hours for every bus, at depot during each night, for charging, maintenance and any other activities.

20.5.4 Subject to the other terms of the Agreement as may be applicable, the Buses in each direction shall be operated by the Operator in line with the Deployment plan provided by the Authority.

20.5.5 The Operator agrees that for every 1% reduction in the Trip Frequency or the Bus Kms Frequency, as the case may be, as compared to the Guaranteed Trip Frequency or the Guaranteed Bus Kms Frequency, it shall pay Damages to the Authority at the rate of 2% of the Monthly Fees. The Damages payable by the Operator for a failure to achieve the Guaranteed Trip Frequency or the Guaranteed Bus Kms Frequency shall be calculated at the end of each month. Provided however, if, based on a verification of the Trip Frequency or Bus Kms Frequency, the Authority determines that the Operator has failed to achieve the Guaranteed Trip Frequency directly as a result of a failure to achieve the Guaranteed Bus Kms Frequency, or *vic-e-versa,* then in order to avoid any double counting of the Damages payable by the Operator, the Authority shall only levy Damages for a failure to achieve one of such Key Performance Indicators, as the case may be.

20.5.6 The Authority agrees that if, in any month, the Trip Frequency or the Bus Kms Frequency is more than the Guaranteed Trip Frequency or the Guaranteed Bus Kms Frequency, respectively, then for every 1% increase in the Trip Frequency or the Bus Kms Frequency over and above the

Guaranteed Trip Frequency or the Guaranteed Bus Kms Frequency, as the case may be, the Authority shall pay to the Operator an incentive equal to 0.05% of the Monthly Fees.

20.6 Safety of Operations

20.6.1 The Parties agree that the safety of the Buses in the fleet shall be measured in terms of the number of accidents per 10,000 Kms (Ten thousand kilometers) (the "General Safety") and the number of severe accidents per month (the "Severe Safety"), respectively.

20.6.2 The General Safety shall be calculated in terms of Minor Accident Factor.

$$\text{Minor Accident Factor} = \frac{\text{No of minor accidents in a month} \times 10{,}000}{\text{Total Bus kms in a month}}$$

The Severe safety shall be calculated in terms of number of Major Accidents.

20.6.3 The Operator agrees that the assured General Safety ("**Assured General Safety**") determined in accordance with Clause 20.6.1 and 20.6.2 shall be equal to or less than 0.01 (zero decimal zero one).

20.6.4 The Operator agrees that for every increase in number of accidents, by a factor of 0.01 (zero decimal zero one) as compared to the Assured General Safety, it shall pay Damages to the Authority at the rate of 2% of the Monthly Fees. The Operator agrees that for every number of Severe Safety incident occurrence, it shall pay Damages to the Authority at the rate of 2 % of the Monthly Fees for each incident.

20.6.5 The Authority agrees that if the General Safety is less than 0.005 (zero decimal zero zero five), then for every 0.001 decrease in the General Safety the Authority shall pay to the Operator an incentive equal to 0.05% of the Monthly Fees.

20.6.6 Event of serious incidents such as Bus catching fire for more than 4% (four Percent) of the lot within a period of 3 (three) months, in such situations Authority may direct Operator to take all Buses off road of that lot and ask the Operator to identify and rectify the cause. Operator may even be asked to check the complete fleet and subjected to thorough inspection by the Authority. No Monthly Assured Bus Kilometer payment will be applicable for non-operation of Buses during such period.

20.7 Operational Infractions

20.7.1 The Operator shall Operate and Maintain the Buses so as to minimize the occurrence of any of the Operational Infractions. An Operational Infraction may be identified by the Authority (or the Authority's Representative) either through inspections of the Buses and Maintenance Depots, User complaints or review of the data generated from the ITS.

20.7.2 The Operator agrees that upon the occurrence of any Operational Infraction, it shall pay to the Authority Damages of an amount corresponding to the breach of such Operational Infraction as set out in Schedule-S. In the event

of any repeated Operational Infractions, the rate of Damages payable by the Operator shall increase in accordance with the provisions of Schedule- S.

20.8 Monthly Report

20.8.1 The Operator shall, no later than 7 (seven) days after the end of each month, furnish to the Authority a report (as per the format in schedule X) containing details of the compliance with the Key Performance Indicators of each Bus as measured on a daily basis. The Operator shall promptly give such other relevant information as may be required by the Authority for the purposes of determining whether the Operator is achieving the Key Performance Indicators as set out in this Article 20.

20.8.2 The Operator shall keep backup for atleast 90 days of raw data and proper records of all data collected from the operation of the Buses from the Data Monitoring System, ITMS or any other systems installed, for the purposes of verification by the Authority.

20.9 Passenger Charter

The Operator shall implement a charter articulating the rights and expectations of Users (the "Passenger Charter") as provided by the Authority. The Operator shall at all times be accountable and liable to Users in accordance with the provisions of the Passenger Charter and Applicable Laws.

20.10 Cap on Damages for failure to achieve Key Performance Indicators

The Operator shall ensure and procure compliance of each of the Key Performance Indicators specified in Article 20. Any Damages payable by the Operator for a failure to achieve the Key Performance Indicators set out in Clauses 20.2 to 20.7 in any month in accordance with this Article 20 shall be capped at 10% of the aggregate Monthly Fees payable in such month. Any Damages payable by the Operator as a result of any Operational Infractions in any month shall be capped at 5% of the Monthly Fees for that month.

20.11 Cap on incentives for exceeding to achieve Key Performance Indicators

Any incentives payable by the Authority to the Operator for exceeding the prescribed Key Performance Indicators in accordance with this Article 20 and rates Specified in Schedule U in any month shall be capped at 5% of the aggregate Monthly Fees for the respective Month.

20.12 Initial Operating Period

During the first 30 (thirty) days of Operations after the first Lot COD as per the Delivery Schedule, the Authority shall provide allowance of up to 25% of the respective Key Performance Indicators to the Operator except safety of operations as per Clause 20.6.

Part IV Financial Covenants

Article 21 FINANCIAL CLOSE

21.1 Financial Close

21.1.1 The Operator hereby agrees and undertakes that it shall achieve Financial Close within 90 (ninety) days from the date of this Agreement and in the event of delay, it shall be entitled to a further period not exceeding 90 (ninety) days, subject to payment of Damages to the Authority in a sum calculated at the rate of 0.1% (zero point one per cent) of the Performance Security for each day of delay and for a further period not exceeding 80 (eighty) days, subject to payment of Damages at the rate of 0.25% (zero point two five per cent) of the Performance Security for each day of delay; provided that the Damages specified herein shall be payable every week in advance and the period beyond the said 90 (ninety) days shall be granted only to the extent of Damages so paid; provided further that no Damages shall be payable if such delay in Financial Close has occurred solely as a result of any default or delay by the Authority in procuring satisfaction of the Conditions Precedent specified in Clause 4.1.2 or due to Force Majeure; and provided further that, if such delay in achieving Financial Close has occurred directly as a result of the Authority's delay in grant of vacant access and Right of Way to the Depot Sites and Maintenance Depot in accordance with Article 10, the Authority shall pay Damages to the Operator in a sum calculated at the rate of 0.1% (zero point one per cent) of the Performance Security for each day of delay. For the avoidance of doubt, the Damages payable hereunder by the Operator shall be in addition to the Damages, if any, due and payable under the provisions of Clause 4.3 for a failure by the Operator in fulfilling any of its Conditions Precedent specified in Clause 4.1.3.

21.2 Termination due to failure to achieve Financial Close

21.2.1 Notwithstanding anything to the contrary contained in this Agreement, in the event that Financial Close does not occur, for any reason whatsoever, within the period set forth in Clause 21.1.1 or the extended period provided thereunder, the Authority shall have the right to terminate this Agreement.

21.2.2 Upon Termination under Clause 21.2.1, the Authority shall be entitled to encash from the Performance Security, an amount equal to the Bid Security and appropriate the proceeds thereof as Damages. provided, however, if Financial Close has not occurred solely as a result of the Authority being in default of any of its obligations under Clause 4.1.2, it shall, upon Termination, return the Performance Security forthwith along with the Damages due and payable under Clause 4.3.

Article 22 FEE and INVOICE

22.1 Fee

22.1.1 In consideration for undertaking the Project, the Authority shall pay the Operator a fee calculated on the basis of methodology mentioned in the clause below, and in accordance with the Deployment Plan by each Bus operated by the Operator and as captured in the ITMS in fulfilment of the Operators obligations under this Agreement (the "Fee"). It is agreed that non capture of the Kilometer in the ITS Platform for reasons attributable to the Authority or any other reason not in control of the Operator will not disentitle the Operator of its Fee provided that the Kilometers for the purpose of Fee is calculated on the odometer reading of the fleet for the performed trips which is invoiced in a particular month.

22.1.2 Subject to Clause 22.4 and Clause 22.5 below, the PK Fee payable to the Operator under this Agreement shall be the calculated in the following manner:

a) If the actual Bus Kilometers travelled by Double Decker Buses is equal to aggregated Monthly Assured Kilometers, then PK Fee shall be calculated by multiplying the PK Fee (INR [●]) with such actual Bus Kilometers

b) If the actual Bus Kilometers travelled by Double Decker Buses is less than the aggregated Monthly Assured Kilometers, then PK Fee shall be calculated, in accordance with clause 22.3.2 by using the following formula:

PK Fee = (PK Fee * actual Bus Kilometers) + (PK Fee * 75%* (Monthly Assured Kilometers — actual Bus Kilometers))

c) If the actual Bus Kilometers travelled by Double Decker Buses is more than the aggregated Monthly Assured Kilometers, then PK Fee shall be calculated, in accordance with clause 22.3.3 by using the following formula:

PK Fee = (PK Fee * Monthly Assured Kilometers) + (PK Fee * 50%* (actual Bus Kilometers - Monthly Assured Kilometers))

For the avoidance of doubt, it is clarified that the Fee, as per the above methodology shall be calculated on a monthly basis.

22.1.3 The Parties agree that a Bus Kilometer shall comprise of the kilometers travelled by a Bus in respect of:

(a) distance travelled by a Bus assigned on a particular Operational Route as per the Deployment Plan;

(b) distance travelled by a Bus from the Maintenance Depot to the first point of loading passengers at the commencement of its service on a day

(c) distance travelled by a Bus from its last Bus Stop as per the Deployment Plan to the Maintenance Depot at the end of the day's service; and

(d) Distance travelled by a Bus, with or without passengers, which

is otherwise outside the Deployment Plan but has been requested or approved by the Authority

22.1.4 The Operator agrees and acknowledges that a Bus Kilometer, for the purpose of payment of the Fee, shall not include any kilometer travelled by the Bus to any maintenance facilities, other than the Maintenance Depot, or for any travel not authorized by the Authority or not captured either in the ITMS platform or the odometer reading of such fleet for the performed trips or otherwise not in accordance with the terms of this Agreement.

22.1.5 For each month after the Lot COD of the first Lot of Buses, the Operator shall compute and provide to the Authority, the total number of Bus Kilometers that all the Buses deployed by the Operator in such month have travelled for the period being reckoned for the purpose of raising the invoice. The Bus kilometers will be calculated on the basis of route survey done jointly by the Authority and the Operator for the pre-determined routes before the start of operations. The payment against these Bus Kilometers will be subject to complete schedule adherence as verified through ITS.

22.1.6 In the event Bus Kilometers is not captured by ITMS on account of default of Authority or any other reason not in control of the Operator, the odometer reading of such fleet for the performed trips shall be referred for calculation of Bus Kilometer.

22.1.7 The Authority shall deposit the Fee due and payable to the Operator subject to and in accordance with this Article 22, into the Escrow Account.

22.2 Payment of Invoice Amount

22.2.1 After the Lot COD for the first Lot of Buses, and for each subsequent month of the Concession Period, the Operator shall be entitled to Fee under Clause 22.1.1 which shall be calculated in accordance with clause 22.1.2 and subject to Clause 22.1.3 to 22.1.7 and included in the monthly invoice in respect of each Bus which has been put into commercial operation, in accordance with Clause 14.2.1, in the relevant month within 7 (seven) days from the end of each month Fee.

22.2.2 Each Invoice shall set out the following amount

(a) the Fee payable to the Operator for such month, based on Clause 22.1 for all Buses deployed in such month;

(b) any costs, Damages or other charges that the Operator is entitled to recover from the Authority in terms of this Agreement;

(c) any costs, Damages or other charges that the Authority is entitled to recover from the Operator in terms of this Agreement as notified by the Authority to the Operator and to which the Operator has no dispute;

(d) cost of electricity to be reimbursed by the Authority to the Operator in accordance with Clause 22.5; and

(e) [any applicable Taxes],

(collectively referred as the "**Invoice Amount**").

22.2.3 The first Invoice to be submitted by the Operator after the Lot COD of the first Lot of Buses shall be pro-rated for the number of days from the Lot COD of the first Lot of Buses until the last working day of the month in which the Lot COD occurs. Each subsequent Invoice shall be a monthly invoice to be submitted to the Authority by the 7th (seventh) day of the immediately following month.

22.2.4 Upon the submission of each Invoice, the Authority shall, within 7 (seven) days from the date of submission of such Invoice, convey its approval for the immediate release of 90% of the amount specified in the Invoice, with the remaining 10% to be released by the 7th (seventh) day of the next month or advise any changes in computing the Fee and/or any necessary deductions or adjustments in accordance with this Agreement and/or Applicable Laws (including any statutory dues) if not factored by the Operator in the said invoice.

22.2.5 If the Authority fails to approve an Invoice pursuant to Clause 22.2.3 above in absence of any advise for changes in computing the Fee and/or any necessary deductions or adjustments in accordance with this Agreement and/or Applicable Laws, within 15 (fifteen) days from the date of submission of such Invoice, the Invoice shall be deemed to be approved and the Operator shall have the right to approach the Escrow Bank for release of the amounts set out in the Invoice.

22.2.6 On receipt of any advice qua changes in computing the Fee and/or any necessary deductions or adjustments in accordance with this Agreement and/or Applicable Laws (including any statutory dues), the Operator shall EITHER agree to the advise and changes of the Authority and accept the amount as decided by the Authority as the Invoice Amount for the said month OR dispute the advice of the Authority qua changes in computing the Fee and/or any necessary deductions or adjustments in accordance with this Agreement and/or Applicable Laws (including any statutory dues),

22.2.7 The parties agree that in the event of dispute between the parties under this Clause, the Authority shall make payment of the undisputed Invoice Amount within seven days of dispute being raised by the Operator under Clause 22.2.5.

22.2.8 Any dispute between the Parties in relation to an Invoice will be settled in accordance with the Dispute Resolution Procedure.

22.3 Assured Kilometres

22.3.1 The Authority agrees that the Deployment Plan shall ensure the average Bus Kilometres scheduled per Bus in each month, commencing from the end of the First month of the Contract Year will be no less than 4500 (the "Monthly Assured Bus Kilometers" for respective Lot). For the first month, the Monthly Assured Bus Kilometres for each Bus shall be calculated on a pro rata basis for the number of days each Bus has been put into Commercial Service during the period commencing from the Lot COD of such Bus and expiring at the end of the first month of the Contract Year.

Notwithstanding anything to the contrary, for any Buses which are procured and put into Commercial Service after the end of the first month of the Contract Year, the Monthly Assured Bus Kilometers for each such Bus for that Contract Year shall be calculated on a pro rata basis for the number of days such Bus has been in Commercial Service during the period commencing from the Lot COD of such Buses and expiring at the end of that respective month.

22.3.2 In the event that a Bus made available by the Operator is not deployed for reasons directly attributable to the Authority or due to a Force Majeure Event, and as a result the Bus operates for less than the Monthly Assured Bus Kilometres in any month, then the Authority will pay to the Operator, the Fees that is calculated in accordance with clause 22.1.2 and subject to 22.1.3 to 22.1.7.

22.3.3 If the Authority utilises any Bus Kilometers over and above the Monthly Assured Bus Kilometers, the Operator shall be entitled to receive Fees for such additional Bus Kilometers, calculated in accordance with clause 22.1.2 and subject to 22.1.3 to 22.1.7.

22.4 Revision of Fee

22.4.1 The Parties agree that the PK Fee shall be revised every 6-months from the date of signing of this Agreement to accommodate price escalation on account of cost of maintenance, material and manpower. “Revision in PK Fee” will be calculated based on the formulae given below:

PK Fees (revised) = (PK Fees) + (PK Fee x (CPIMonth — CPIBase)/ CPIBase x 0.05) + (PK Fee x (MWMonth — MWBase)/ MWBase x 0.25)

Where,

PK Fee shall be Bus Fee for 20 Double Decker buses

CPI Base = Index value issued by Government of India's Labour Bureau's Consumer Price Index for Industrial Workers (CPI- IW) at the time of Bid end date.

CPI Month = Index value issued by Government of India's Labour Bureau's Consumer Price Index for Industrial Workers (CPI- IW) for particular month when the price variation is applicable.

MWBase = Minimum wages notified by the Labour department of that state applicable at the time of bid end date for skilled category

MWMonth= Minimum wages for skilled category for particular month, notified by the Labour department of the state

22.4.2 The Parties agree that the PK Fee shall stand revised pursuant to any amendment in accordance with this Clause 22.4 and shall become the base PK Fee as the case may be payable to the Operator under this Agreement.

22.5 Electricity Cost

22.5.1 The Parties agree and acknowledge that, as on the date of this Agreement,

the PK Fee is inclusive of electricity cost including consumption charges, fixed charges, cess, taxes and other charges imposed by the local DISCOM at HT level metering dedicated for the operator. The operator is responsible for payment of electricity charges for operation and maintenance of buses and maintenance depot to the local DISCOM. The Parties agree that the Authority is liable for any increase in electricity tariff or other related charges including fixed fee, cess, taxes, etc post the Bid Due Date and shall compensate the Operator for any such increase in tariff up to the Allowed Energy Consumption as defined in

22.5.2. The bidder shall raise invoice against the increase in input costs for electricity along with actual bills and supporting documents of the revised electricity cost on actual basis as part of monthly bills. Reconciliation of payment against the differential in electricity tariff to be done annually subject to allowed energy consumption as defined in 22.5.2.

22.5.2 The Parties agree that allowed energy consumption or energy efficiency at the fleet level for the bus lot shall be [●] ("**Allowed Energy Consumption**" for Lot). For the avoidance of doubt, the Allowed Energy Consumption will be calculated as follows:

Allowed Energy Consumption for Double Decker Buses = (1.3 kWh/km * Actual Bus Kms operated in a year for the **Double Decker Buses**)

To further clarify, the Allowed Energy Consumption will be calculated for only the type(s) of Buses which are deployed with the Authority.
For illustration purpose only:

A	Allowed Energy Consumption (kWh)	7,410
B	Base Electricity Tariff (INR/unit)	5
C	Actual Electricity Tariff (INR/unit)	7
	Case 1: Metered Energy Consumed > A	
D	Billed units by DISCOM	8,000
E	Electricity tariff variation to be paid for (units)	7,410
F	Variation to be paid E*(C-B)	14,820
	Case 2: Metered Energy Consumed <= A	
G	Billed units by DISCOM	7,000
H	Electricity tariff variation to be paid for (units)	7,000
I	Variation to be paid H*(C-B)	14,000

22.5.3 The cost of any electricity consumed on account of (i) charging of the Buses requiring electricity in excess of the Allowed Energy Consumption; (ii) the use of any other equipment, plant and machinery at the Maintenance Depot (apart from the Charging Infrastructure); and (iii) the Operations and Maintenance of the Maintenance Depot including taxes and other charges imposed by the local DISCOM, shall be payable by the Operator.

22.5.4 The Operator/Authority may install a sub-meter to measure electricity consumption by the Authority at the depot. The Operator shall raise an invoice for the consumption at the prevailing tariff and the Authority is liable to pay the cost of electricity consumed by the Authority.

22.6 Payment Security to the Operator

22.6.1 Government of Tamil Nadu vide Government Order _____has set up a revolving fund for the purpose of replenishing any deficit that may arise in maintaining (3) three months' balance of funds in a revolving fund account ("Designated Account"). The Designated Account shall have an initial amount equal to 3 (three) months' estimated Fees payable by the Authority to the Operator. The Designated Account is operated by a Financial institution of Government of Tamil Nadu. In case the Authority fails to ensure Minimum Escrow Balance in terms of Clause 27.1.3 of this Agreement then the Escrow account shall be replenished by Designated Account upon request of the Authority.

Article 23 DAMAGES FOR DELAY

23.1 The Authority hereby undertakes to perform all its obligations under this Agreement failing which it shall be liable to recompense the Operator by paying Damages as per Schedule U in addition to other compensation provided for in this agreement.

23.2 The Operator hereby undertakes to perform all its obligations under this Agreement failing which it shall be liable to recompense the Authority by paying Damages as per Schedule V in addition to other compensation provided for in this agreement.

23.3 For all amounts payable under Clause 23.1 and 23.2, concerned Party shall raise invoices on the other Party on a monthly basis. Such amounts shall be payable by the other Party or otherwise adjusted against other payments due within 30 (thirty) days of receipt of notice.

23.4 Any deferment or delay in raising invoices shall not absolve the other Party from its obligation to pay the amounts that have accrued.

Article 24 TRANSFER OF MAINTENANCE DEPOT

24.1 Transfer of Maintenance Depot

24.1.1 The Maintenance Depot shall, in accordance with the provisions of this Agreement, be handed over to the Authority upon Termination of this Agreement or expiry of the Concession Period. The Parties expressly agree that for and in respect of the transfer hereunder, the provisions of Article 33 shall apply *mutatis mutandis*.

24.1.2 Upon the handover of the Maintenance Depot from the Operator to the Authority pursuant to Clause 24.1.1, all equipment, machinery, building, structures, hardware, software licenses and other assets comprising the Maintenance Depot (including the Charging Infrastructure) shall vest in the Authority without any Encumbrance.

Article 25 INSURANCE

25.1 Insurance during Concession Period

The Operator shall effect and maintain at its own cost, during the Concession Period, such insurances for such maximum sums as may be required under this Agreement, Applicable Laws, and such insurances as may be necessary or prudent in accordance with Good Industry Practice. The Operator shall also effect and maintain such insurances as may be necessary for mitigating the risks that may devolve on the Authority as a consequence of any act or omission of the Operator during the Concession Period. The Operator shall procure that in each insurance policy, the Authority shall be a co-insured.

25.2 Insurance Cover

Without prejudice to the provisions contained in Clause 25.1, the Operator shall, during the Concession Period, procure and maintain Insurance Cover including but not limited to the following:

(a) Construction All Risk policy during the period of Fit Outs

(b) total loss, damage or destruction of the Maintenance Depot, Buses, Charging Infrastructure and Opportunity Charging Stations, if any;

(c) comprehensive third party liability insurance for life, goods or property, including injury to or death of personnel of the Authority or others, arising from any accident at the Maintenance Depot or otherwise, caused by a Bus on account of any negligence of the Operator or a defect or deficiency in a Bus;

(d) the Operator's general liability arising out of the Agreement;

(e) workmen's compensation insurance; and

(f) any other insurance that may be necessary to protect the Operator and its employees, including all Force Majeure Events that are insurable and not otherwise covered in items (a) to (d) above.

25.3 Notice to the Authority

No later than 15 (fifteen) days from the Appointed Date, the Operator shall by notice furnish to the Authority, in reasonable detail, information in respect of the insurances that it proposes to effect and maintain in accordance with Article 25. Within 15 (fifteen) days of receipt of such notice, the Authority may require the Operator to effect and maintain such other insurances as may be necessary pursuant hereto, and in the event of any difference or disagreement relating to any such insurance, the Dispute Resolution Procedure shall apply. Notwithstanding the difference or disagreement raised by the Authority and without prejudice to the rights and remedies available to the Authority for such disagreemnt, the Operator shall effect the insurance under this Clause and that the Authority shall not be liable in any manner whatsoever for any loss caused to the Operator in absence of

insurance cover.

25.4 Evidence of Insurance Cover

All insurances obtained by the Operator in accordance with this Article 25 shall be maintained with insurers on terms consistent with Good Industry Practice. Within 15 (fifteen) days of obtaining any insurance cover, the Operator shall furnish to the Authority, notarised true copies of the certificate(s) of insurance, copies of insurance policies and premia payment receipts in respect of such insurance, and no such insurance shall be cancelled, modified, or allowed to expire or lapse until the expiration of at least 45 (forty five) days after notice of such proposed cancellation, modification or non-renewal has been delivered by the Operator to the Authority.

25.5 Remedy for failure to insure

If the Operator fails to effect and keep in force all insurances for which it is responsible pursuant hereto, the Authority shall have the option to either keep in force any such insurances, and pay such premia and recover the costs thereof from the Operator, or in the event of computation of a Termination Payment, treat an amount equal to the Insurance Cover as deemed to have been received by the Operator.

25.6 Waiver of subrogation

All insurance policies in respect of the insurance obtained by the Operator pursuant to this Article 25 shall include a waiver of any and all rights of subrogation or recovery of the insurers thereunder against, *inter alia*, the Authority, and its assigns, successors, undertakings and their subsidiaries, affiliates, employees, insurers and underwriters, and of any right of the insurers to any set-off or counterclaim or any other deduction, whether by attachment or otherwise, in respect of any liability of any such person insured under any such policy or in any way connected with any loss, liability or obligation covered by such policies of insurance.

25.7 Operator's waiver

The Operator hereby further releases, assigns and waives any and all rights of subrogation or recovery against, *inter alia*, the Authority and its assigns, undertakings and their subsidiaries, affiliates, employees, successors, insurers and underwriters, which the Operator may otherwise have or acquire in or from or in any way connected with any loss, liability or obligation covered by policies of insurance maintained or required to be maintained by the Operator pursuant to this Agreement (other than third party liability insurance policies) or because of deductible clauses in or inadequacy of limits of any such policies of insurance.

25.8 Application of insurance proceeds

The proceeds from all insurance claims, except life and injury, shall be paid

to the Operator, and it shall apply such proceeds for any necessary repair, reconstruction, reinstatement, replacement, improvement, delivery or installation of the Buses or Maintenance Depot.

25.9 Compliance with conditions of insurance policies

The Operator expressly acknowledges and undertakes to fully indemnify the Authority from and against all losses and claims arising from the Operator's failure to comply with conditions imposed by the insurance policies effected in accordance with this Agreement.

Article 26 ACCOUNTS AND AUDIT

26.1 Audited accounts

26.1.1 The Operator shall maintain books of accounts recording all its receipts, income, expenditure, payments, assets and liabilities, in accordance with this Agreement, Good Industry Practice, Applicable Laws and Applicable Permits. The Operator shall provide 2 (two) copies of its balance sheet, cash flow statement and profit and loss account, along with a report thereon by its Statutory Auditors, within 90 (ninety) days of the close of its accounting year to which they pertain and such audited accounts, save and except where expressly provided to the contrary, shall form the basis of payments by either Party under this Agreement. The Authority shall have the right to inspect the records of the Operator during office hours and require copies of relevant extracts of books of accounts, duly certified by the Statutory Auditors, to be provided to the Authority for verification of basis of payments, and in the event of any discrepancy or error being found, the same shall be rectified and such rectified account shall form the basis of payments by either Party under this Agreement.

26.1.2 The Operator shall, within 90 (ninety) days of the close of each accounting year, furnish to the Authority its audited annual financial results, in the manner and form prescribed by the Securities and Exchange Board of India for publication of annual results by the companies listed on a stock exchange.

26.1.3 On or before the expiry of 3 (three) months after its accounting year, the Operator shall provide to the Authority, for that accounting year, a statement duly audited by its Statutory Auditors giving summarised information on (a) the bills raised by the Operator for payment by the Authority, (b) the payments received and other revenues derived from the Authority, and (c) such other information as the Authority may reasonably require.

26.2 Appointment of auditors

26.2.1 The Operator shall appoint, and have during the subsistence of this Agreement as its Statutory Auditors, a firm chosen by it from the mutually agreed list of 5 (five) reputable firms of chartered accountants (the "Panel of Chartered Accountants"), such list to be prepared substantially in accordance with the criteria set forth in Schedule-T In case the bidder has an existing statutory auditor meeting the eligibility criteria mentioned in Schedule- T, the Operator shall request the Authority for appointment of the existing auditors for the project. The Authority may, at its discretion agree to the appointment of the operator's existing Statutory Auditor for the project. All fees and expenses of the Statutory Auditors shall be borne by the Operator.

26.2.2 The Operator may terminate the appointment of its Statutory Auditors after a notice of 45 (forty-five) days to the Authority, subject to the replacement Statutory Auditors being appointed from the Panel of Chartered

Accountants.

26.2.3 Notwithstanding anything to the contrary contained in this Agreement, the Authority shall have the right, but not the obligation, to appoint at its cost from time to time and at any time, another firm (the "**Additional Auditors**") from the Panel of Chartered Accountants to audit and verify all those matters, expenses, costs, realisations and things which the Statutory Auditors are required to do, undertake or certify pursuant to this Agreement.

26.3 Certification of claims by Statutory Auditors

Any claim or document provided by the Operator to the Authority in connection with or relating to receipts, income, payments, costs, expenses, accounts or audit, and any matter incidental thereto shall be valid and effective only if certified by its Statutory Auditors.

26.4 Set-off

In the event any amount is due and payable by the Authority to the Operator, it may set-off any sums payable to it by the Operator and pay the balance remaining forthwith.

26.5 Dispute resolution

In the event of there being any difference between the findings of the Additional Auditors and the certification provided by the Statutory Auditors, such Auditors shall meet to resolve the differences and if they are unable to resolve the same, such Dispute shall be resolved by the Authority by recourse to the Dispute Resolution Procedure.

Article 27 ESCROW ACCOUNT

27.1 Escrow Account

27.1.1 The Authority shall, prior to the Appointed Date open/establish, maintain and operate a and establish an account" with a Bank ("**Escrow Bank**") in accordance with this Agreement and the Escrow Agreement.

27.1.2 For the purpose of opening/establishing, maintaining and operating the Escrow Account, the Authority shall, as a Condition Precedent, enter into an agreement with the Operator and Escrow Bank ("**Escrow Agreement**") in accordance with the format provided in Schedule-M to this Agreement.

27.1.3 The Authority shall on or before the Lot COD of the first Lot of Buses, deposit in the Escrow Account a sum equal to 3 (three) months' estimated Fees payable to the Operator ("**Minimum Escrow Balance**") and for this purpose, the Authority shall replenish with its own resources, any deficit that may arise in maintaining such balance of funds The Authority undertakes to maintain the Minimum Escrow Balance throughout the concession period. It is clarified that a COD shall not be achieved under this Agreement till the time the **Minimum Escrow Balance** is deposited in the Escrow Account.

27.1.4 The Authority covenants, that in the event of shortfall of the Minimum Escrow Balance in the Escrow Account at any time during the duration of this Concession Period, the Escrow Bank shall have irrevocable authority to intimate the "Financial Institution" pursuant to Clause 22.6.1, that the Escrow Account is short of such amount as is required to maintain the Minimum Escrow Balance and the "Financial Institution/" shall upon mere intimation from the Escrow Bank in this regard without any further confirmation from the Authority, transfer such amount as is required to maintain the Minimum Escrow Balance in the Escrow Account..

27.1.5 Through out the Concession Period, the Authority has agreed to deposit in the Escrow Account all the Project Revenues and other receivables as per Clause 27.2.1 and maintain the Minimum Escrow Balance. The Authority for this purpose shall take grants/contributions/financial support from Government of Tamil Nadu ("**GoTN**"). It is clarified that the non-receipt of grants/contributions/financial support from GoTN shall not absolve the Authority from its obligation to maintain the Minimum Escrow Balance in. Failure of the Authority to comply with this Clause 27.1.6 shall result in the Authority Event of Default.

27.2 Deposit in Escrow Account

27.2.1 The Authority shall deposit or cause to be deposited the following inflows and receipts into the Escrow Account and maintain the Minimum Escrow Balance:

(a) All Fees and taxes thereon due and payable to the Operator subject to and in accordance with Article 22;

(b) any deposits required to be made by the Authority to maintain the Minimum Escrow Balance;
(c) all grants, payments and financial support received by the Authority from the GoTN and in relation to the Project;
(d) amounts towards insurance claims, if any, received;
(e) all payments due to the Operator towards any Damages payable by the Authority under and in accordance with the terms of this Agreement; any amounts towards Termination Payment due to the Operator;
(f) all revenues generated and all the income accruing from the Project including but not limited to the daily farebox and non-farebox revenue and advertising revenue, etc.; and

any other revenues or capital receipts from or in respect of the Project.

27.3 Withdrawal During Concession Period

27.3.1 The Authority shall, at the time of opening the Escrow Account, give irrevocable instructions, by way of the Escrow Agreement, to the Escrow Bank instructing, *inter alia*, that deposits in the Escrow Account shall be appropriated in the following order every month, or at shorter intervals as may be necessary pursuant to the terms of this Agreement, and if not due in a month then appropriated proportionately in such month and retained in the Escrow Account and paid out therefrom in the month when due:

(a) all taxes due and payable by the Operator for and in respect of the Project;
(b) all Fees due and payable to the Operator subject to and in accordance with Article 22;
(c) O&M Expenses and other costs and expenses incurred by the Authority in accordance with the provisions of this Agreement, and certified by the Authority as due and payable to it;
(d) all payments and Damages certified by the Authority as due and payable to it by the Operator; and
(e) balance, if any, in accordance with the instructions of the Authority.

Provided that any and all payments to the Operator from the Escrow Account under this Agreement shall be first made into the account designated by the lender(s) of the Operator.

27.3.2 The Authority shall not in any manner modify the order of payment specified in Clause 27.3.1, except with the prior written approval of the Operator.

27.4 Withdrawal upon Termination

27.4.1 Notwithstanding anything to the contrary contained in the Escrow Agreement upon Termination of this Agreement, the amounts standing to the credit of the Escrow Account mentioned below shall be appropriated in the following order.

(a) all taxes due and payable by the Operator for and in respect of the Project;
(b) 90% (ninety per cent) of Debt Due;
(c) all payments and Damages certified by the Authority as due and payable to it by the Operator;
(d) retention and payments relating to the liability for defects and deficiencies set forth in Article 37;
(e) outstanding Debt Service including the balance of Debt Due;
(f) incurred or accrued Fees;
(g) any payments due and payable to the Authority;
(h) any other payments required to be made under this Agreement; and
(i) balance, if any, in accordance with the instructions of the Authority.

Provided that no appropriations shall be made under Sub-clause (h) of this Clause 27.4.1 until a Vesting Certificate has been issued by the Authority under the provisions of Article
33. The provisions of this Article 27 and the instructions contained in the Escrow Agreement shall remain in full force and effect until the obligations set forth in Clause 27.4.1 have been discharged.

Provided further that any and all payments to the Operator from the Escrow Account under this Agreement shall be first made into the account designated by the lender(s) of the Operator.

Article 28 TRAFFIC REGULATION AND SECURITY

28.1 Traffic regulation by the Operator

28.1.1 The Operator shall, in consultation with the Authority, regulate the use of the Buses by the Users in accordance with Applicable Laws and subject to the supervision and control of the Authority or a substitute thereof empowered in this behalf under the Applicable Laws.

28.1.2 The Operator shall, in consultation with the Authority, evolve and publicise a system based on Good Industry Practice such that no User or category of Users is discriminated against or unduly favoured, as the case may be, in the use of the Buses.

28.1.3 The Operator shall have the right and obligation to manage, operate and regulate the Buses on a common carrier basis providing non-discriminatory services to all persons.

28.2 Security

28.2.1 The Operator acknowledges and agrees that unless otherwise specified in this Agreement it shall, at its own cost and expense, provide or cause to be provided security at the Maintenance Depot and with suitable use of technology within the Buses for deterrence of vandalism, arson, terrorism, hijacking, sabotage and/or similar acts or occurrences; provided that the Authority and the Operator may at any time mutually enter into an agreement to jointly provide security services in the Buses.

28.2.2 The Operator shall abide by and implement any instructions of the Authority for enhancing the security within the Buses and at the Maintenance Depot. The Operator shall co- operate with any relevant organisations appointed by the Authority for the purpose of providing security. The Authority agrees that it shall cause the relevant organisations to take such actions as reasonably deemed necessary by them, in order to ensure security within the Buses, without unduly or unreasonably disrupting the operations of the Buses or interfering with the exercise of rights or fulfilment of obligations by the Operator under this Agreement. The Operator agrees that it shall extend its full support and cooperation to the Authority and to the other organisations authorised by the Authority in the discharge of their obligations thereunder.

28.2.3 Subject to the rights of the Operator under this Clause 28.2.3, the Authority or any agency duly authorised by it shall be entitled to inspect and search all Buses and the Maintenance Depot and to search any person or vehicle entering the Depot Sites or departing there from, without unduly or unreasonably disrupting the operations of the Buses.

28.2.4 The Authority agrees that it shall, at the request of the Operator, procure and provide the services of security forces of the Authority on a best effort basis.

28.2.5 The Authority shall ensure and procure that the personnel of the Operator and all its contractors, suppliers, sub-contractors and agents and the Users of the Buses are allowed free ingress and egress from the limits of the Buses and the Maintenance Depot without any unreasonable interference by the personnel of the Authority, including the security personnel employed by or on behalf of the Authority.

Part V Force Majeure and Termination

Article 29 FORCE MAJEURE

29.1 Force Majeure

As used in this Agreement, the expression "**Force Majeure**" or "**Force Majeure Event**" shall mean, save and except as expressly provided otherwise, occurrence in India of any Non- Political Event, Indirect Political Event and Political Event, as defined in Clauses 29.2,
29.3 and 29.4, respectively, if, and to the extent, it affects the performance by the Party claiming the benefit of Force Majeure (the "**Affected Party**") of its obligations under this Agreement and which act or event (a) is beyond the reasonable control of the Affected Party, and (b) could not have been prevented or overcome by the Affected Party by exercise of due diligence and by following Good Industry Practice, and (c) has a Material Adverse Effect on the Affected Party.

29.2 Non-Political Event

A Non-Political Event shall mean one or more of the following acts or events:

(a) act of God, epidemics, pandemics, extremely adverse weather conditions, lightning, earthquake, landslide, cyclone, flood, volcanic eruption, chemical or radioactive contamination or ionising radiation, fire or explosion;

(b) strikes or boycotts (other than those involving the Operator, Contractors or their respective employees/representatives, or directly attributable to any act or omission of any of them) interrupting supplies and services to the Project for a continuous period of 24 (twenty-four) hours and an aggregate period exceeding 7 (seven) days in an Accounting Year, and not being an Indirect Political Event set forth in Clause 29.3;

(c) any failure or delay of a Contractor but only to the extent caused by another Non- Political Event and which does not result in any offsetting compensation being payable to the Operator by or on behalf of such Contractor;

(d) any delay or failure of an overseas Contractor to deliver the Buses or equipment to India if such delay or failure is caused outside India by any event specified in Subclause (a) above and which does not result in any offsetting compensation being payable to the Operator by or on behalf of such Contractor;

(e) any judgement or order of any court of competent jurisdiction or statutory authority made against the Operator in any proceedings for reasons other than
(i) failure of the Operator to comply with any Applicable Law or Applicable Permit, or (ii) on account of breach of any Applicable Law or Applicable Permit or of any contract, or (iii) enforcement of this Agreement, or (iv) exercise of any of its rights under this Agreement by the Authority;

(f) the discovery of geological conditions, toxic contamination or archaeological remains on the Depot Sites that could not reasonably have been expected to be discovered through a site inspection; or

(g) any event or circumstances of a nature analogous to any of the foregoing.

29.3 Indirect Political Event

An Indirect Political Event shall mean one or more of the following acts or events:

(a) an act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, blockade, embargo, riot, insurrection, terrorist or military action,
civil commotion or politically motivated sabotage;

(b) any political or economic upheaval, disturbance, movement, struggle or similar occurrence which could not have been anticipated or foreseen by a prudent person and which causes the construction or operation of the Project to be financially unviable or otherwise not feasible;

(c) industry-wide or State-wide strikes or industrial action for a continuous period of 24 (twenty-four) hours and exceeding an aggregate period of 7 (seven) days in an Accounting Year;

(d) any civil commotion, boycott or political agitation which prevents production, and assembly of Buses, Fit Out Works at the Maintenance Depots or fulfilment of Operations and Maintenance obligations of the Operator for an aggregate period exceeding 15 (fifteen) days in an Accounting Year;

(e) failure of the Authority to permit the Operator to continue perform its obligations under this Agreement, with or without modifications, in the event of stoppage of any works after discovery of any geological or archaeological finds or for any other reason;

(f) any failure or delay of a Contractor to the extent caused by any Indirect Political Event and which does not result in any offsetting compensation being payable to the Operator by or on behalf of such Contractor;

(g) any Indirect Political Event that causes a Non-Political Event;

(h) the imposition, by any Government Instrumentality, of any lockdowns, curfews or mandatory quarantine rules arising out of the occurrence of any Non-Political Event or otherwise, which prevents the manufacture, procurement and delivery of the Buses, of the Fit-Out Works at the Maintenance Depots or fulfilment of the Operations and Maintenance obligations of the Operator for an aggregate period exceeding 7 (seven) days in an Accounting Year; or

(i) any event or circumstances of a nature analogous to any of the foregoing.

29.4 Political Event

A Political Event shall mean one or more of the following acts or events by

or on account of any Government Instrumentality:

(a) a Change in Law;

(b) compulsory acquisition in national interest or expropriation of any Project Assets or rights of the Operator or of the Contractors;

(c) unlawful or unauthorized or without jurisdiction revocation of, or refusal to renew or grant without valid cause, any clearance, licence, permit, authorisation, no objection certificate, consent, approval or exemption required by the Operator or any of the Contractors to perform their respective obligations under this Agreement and the Project Agreements; provided that such delay, modification, denial, refusal or revocation did not result from the Operator's or any Contractor's inability or failure to comply with any condition relating to grant, maintenance or renewal of such clearance, licence, authorisation, no objection certificate, exemption, consent, approval or permit;

(d) any failure or delay of a Contractor but only to the extent caused by another Political Event and which does not result in any offsetting compensation being payable to the Operator by or on behalf of such Contractor; or

(e) any event or circumstance of a nature analogous to any of the foregoing.

29.5 Duty to report Force Majeure Event

29.5.1 Upon occurrence of a Force Majeure Event, the Affected Party shall by notice report such occurrence to the other Party forthwith. Any notice pursuant hereto shall include full particulars of:

(a) the nature and extent of each Force Majeure Event which is the subject of any claim for relief under this Article 29 with evidence in support thereof;

(b) the estimated duration and the effect or probable effect which such Force Majeure Event is having or will have on the Affected Party's performance of its obligations under this Agreement;

(c) the measures which the Affected Party is taking or proposes to take for alleviating the impact of such Force Majeure Event; and

(d) any other information relevant to the Affected Party's claim.

29.5.2 The Affected Party shall not be entitled to any relief for or in respect of a Force Majeure Event unless it shall have notified the other Party of the occurrence of the Force Majeure Event as soon as reasonably practicable, and in any event no later than 7 (seven) days after the Affected Party knew, or ought reasonably to have known, of its occurrence, and shall have given particulars of the probable material effect that the Force Majeure Event is likely to have on the performance of its obligations under this Agreement.

29.5.3 For so long as the Affected Party continues to claim to be materially affected by such Force Majeure Event, it shall provide the other Party with regular (and not less than weekly) reports containing information as required by Clause 29.5.1, and such other information as the other Party may reasonably

request the Affected Party to provide.

29.6 Effect of Force Majeure Event on the Concession Period

29.6.1 Upon the occurrence of any Force Majeure Event prior to the Appointed Date, the period set forth in Clause 4.2 for fulfilment of Conditions Precedent and for achieving the Appointed Date shall be extended by a period equal in length to the duration of the Force Majeure Event.

29.6.2 At any time after the Appointed Date and up until COD, if any Force Majeure Event occurs, the Concession Period shall be extended by a period, equal in length to the period during which the Operator was prevented from performing its obligations.

29.7 Allocation of costs arising out of Force Majeure

29.7.1 Upon occurrence of any Force Majeure Event prior to the Appointed Date, the Parties shall bear their respective costs and no Party shall be required to pay to the other Party any costs thereof.

29.7.2 Upon occurrence of a Force Majeure Event after the Appointed Date, the costs incurred and directly attributable to such event and directly relating to the Project (the "**Force Majeure Costs**") shall be allocated and paid as follows:

(a) upon occurrence of a Non-Political Event, the Parties shall bear their respective Force Majeure Costs and neither Party shall be required to pay to the other Party any costs thereof;

(b) upon occurrence of an Indirect Political Event, all Force Majeure Costs attributable to such Indirect Political Event, and not exceeding the Insurance Cover for such Indirect Political Event, shall be borne by the Operator, and to the extent Force Majeure Costs exceed such Insurance Cover, one half of such excess amount shall be reimbursed by the Authority to the Operator; and

(c) upon occurrence of a Political Event, all Force Majeure Costs attributable to such Political Event shall be reimbursed by the Authority to the Operator, provided that in case of a Change in Law, no additional compensation shall be payable to the Operator if the consequences of such Change in Law have been dealt with under and in accordance with the provisions of Article 36.

For the avoidance of doubt, Force Majeure Costs shall only include costs directly attributable remedying, rectifying and/or mitigating such Force Majeure Event and shall not include interest payments on debt, O&M Expenses, any increase in the cost of the Fit Out Works or the Buses on account of inflation, loss of income or debt repayment obligations and for determining such costs, the Affected Party shall be required to submit such information as may be relevant to evidence that it has incurred such costs, including documentary proof such as receipts, challans, invoices etc.

29.7.3 Save and except as expressly provided in this Article 29, neither Party shall be liable in any manner whatsoever to the other Party in respect of any loss,

damage, cost, expense, claims, demands and proceedings relating to or arising out of occurrence or existence of any Force Majeure Event or exercise of any right pursuant hereto.

29.8 Termination Notice for Force Majeure Event

29.8.1 If a Force Majeure Event affecting all, or substantially all, parts of the Project subsists for a period of 180 (one hundred and eighty) days or more within a continuous period of 365 (three hundred and sixty five) days, then and subject to Clause 29.8.2 below, either Party may in its discretion terminate this Agreement by issuing a Termination Notice to the other Party without being liable in any manner whatsoever, save as provided in this Article 29, and upon issue of such Termination Notice, this Agreement shall, notwithstanding anything to the contrary contained herein, stand terminated forthwith; provided that before issuing such Termination Notice, the Party intending to issue the Termination Notice shall inform the other Party of such intention and grant 15 (fifteen) days' time to make a representation, and may after the expiry of such 15 (fifteen) days period, whether or not it is in receipt of such representation, in its sole discretion issue the Termination Notice.

29.8.2 If a Force Majeure Event affecting all, or substantially all, parts of the Project occurs after the Lot COD has been achieved for at least 75% (seventy five percent) of the total Buses procured under this Agreement, then the Operator shall not have a right to terminate this Agreement pursuant to Clause 29.8.1 above subject to Authority fulfilling its obligations provided in Clause 22.3.2.

29.9 Termination Payment for Force Majeure Event

29.9.1 If Termination is on account of a Non-Political Event, the Authority shall make a Termination Payment to the Operator in an amount equal to 90% (ninety per cent) of the Debt Due less Insurance Cover.

29.9.2 If Termination is on account of an Indirect Political Event, the Authority shall make a Termination Payment to the Operator in an amount equal to:

(a) Debt Due less Insurance Cover; provided that if any insurance claims forming part of the Insurance Cover are not admitted and paid, then 80% (eighty per cent) of such unpaid claims shall be included in the computation of Debt Due;
(b) 110% (one hundred and ten per cent) of the Adjusted Equity; and
(c) an amount equivalent to the Additional Termination Payment less Insurance Cover; provided that if any insurance claims forming part of the Insurance Cover are not admitted and paid, then 80% (eighty per cent) of such unpaid claims shall be included in computation of the amount payable hereunder.

29.9.3 If Termination is on account of a Political Event, the Authority shall make a Termination Payment to the Operator in an amount that would be payable under Clause 32.3 as if it were an Authority Default.

29.10 Dispute resolution

In the event that the Parties are unable to agree in good faith about the occurrence or existence of a Force Majeure Event, such Dispute shall be finally settled in accordance with the Dispute Resolution Procedure; provided that the burden of proof as to the occurrence or existence of such Force Majeure Event shall be upon the Party claiming relief and/or excuse on account of such Force Majeure Event. Asset redeployment shall be allowed while termination is in process.

29.11 Excuse from performance of obligations

If the Affected Party is rendered wholly or partially unable to perform its obligations under this Agreement because of a Force Majeure Event, it shall be excused from performance of such of its obligations to the extent it is unable to perform on account of such Force Majeure Event; provided that:

(a) the suspension of performance shall be of no greater scope and of no longer duration than is reasonably required by the Force Majeure Event;

(b) the Affected Party shall make all reasonable efforts to mitigate or limit damage to the other Party arising out of or as a result of the existence or occurrence of such Force Majeure Event and to cure the same with due diligence; and

(c) when the Affected Party is able to resume performance of its obligations under this Agreement, it shall give to the other Party notice to that effect and shall promptly resume performance of its obligations hereunder.

Article 30 COMPENSATION FOR BREACH OF AGREEMENT

30.1 Compensation for default by the Operator

In the event of the Operator being in material default or breach of this Agreement, it shall subject to Clause 30.5 pay to the Authority by way of compensation, all direct costs suffered or incurred by the Authority as a consequence of such material default or breach, within 30 (thirty) days of receipt of the demand supported by necessary particulars thereof; provided that no compensation shall be payable under this Clause 30.1 for any default or breach in respect of which Damages are expressly specified and payable under this Agreement.

30.2 Compensation for default by the Authority

In the event of the Authority being in material default or breach of this Agreement at any time after the Appointed Date, it shall subject to Clause 30.5 pay to the Operator by way of compensation, all direct costs suffered or incurred by the Operator as a consequence of such material default or breach within 30 (thirty) days of receipt of the demand supported by necessary particulars thereof; provided that no such compensation shall be payable for any material breach or default in respect of which Damages have been expressly specified in this Agreement.

30.3 Extension of Concession Period

Subject to the provisions of Clause 30.5, in the event that a material default or breach of this Agreement set forth in Clause 30.2 causes delay in achieving COD, the Authority shall, in addition to payment of compensation under Clause 30.2, extend the Concession Period, with such extension being equal in duration to the period by which COD was delayed.

30.4 Compensation to be in addition

Compensation payable under this Article 30 shall be in addition to, and without prejudice to, the other rights and remedies of the Parties under this Agreement including Termination thereof.

30.5 Mitigation of costs and damage

The affected Party shall make all reasonable efforts to mitigate or limit the costs and damage arising out of or as a result of breach of Agreement by the other Party.

Article 31 SUSPENSION OF OPERATOR'S RIGHTS

31.1 Suspension upon Operator Default

Upon occurrence of an Operator Default, the Authority shall be entitled, without prejudice to its other rights and remedies under this Agreement including its rights of Termination hereunder, to (a) suspend all rights of the Operator under this Agreement including the Operator's right to receive the Fee, and other payments pursuant hereto, and (b) exercise such rights itself and perform the obligations hereunder or authorise any other person to exercise or perform the same on its behalf during such suspension (the "**Suspension**"). Suspension hereunder shall be effective forthwith upon issue of notice by the Authority to the Operator and may extend up to a period not exceeding 180 (one hundred and eighty) days from the date of issue of such notice.

31.2 Authority to act on behalf of Operator

31.2.1 During the period of Suspension, the Authority may, at its option and at the risk and cost of the Operator, remedy and rectify the cause of Suspension. The Authority shall be entitled to make deductions from the Fee for meeting the costs incurred by it for remedying and rectifying the cause of Suspension, and for incurring any expenses on Operation and Maintenance of Buses.

31.2.2 During the period of Suspension hereunder, all assets and liabilities in relation to the Operation and Maintenance of Buses, including the Maintenance Depots, shall continue to vest in the Operator in accordance with the provisions of this Agreement and all things done or actions taken, including expenditure incurred by the Authority for discharging the obligations of the Operator under and in accordance with this Agreement, shall be deemed to have been done or taken for and on behalf of the Operator and the Operator undertakes to indemnify the Authority for all costs incurred during such period. The Operator hereby licenses and sub-licenses respectively, the Authority or any other person authorised by it under Clause 31.1 to use during Suspension, all Intellectual Property belonging to or licensed to the Operator for and in respect of Operation and Maintenance of Buses.

31.3 Revocation of Suspension

31.3.1 In the event that the Authority shall have rectified or removed the cause of Suspension within a period not exceeding 90 (ninety) days from the date of Suspension, it shall revoke the Suspension forthwith and restore all rights of the Operator under this Agreement. For the avoidance of doubt, the Parties expressly agree that the Authority may, in its discretion, revoke the Suspension at any time, whether or not the cause of Suspension has been rectified or removed hereunder.

31.3.2 Upon the Operator having cured the Operator Default within a period not exceeding 90 (ninety) days from the date of Suspension, the Authority shall

revoke the Suspension forthwith and restore all rights of the Operator under this Agreement. For the avoidance of doubt, the Authority shall provide access to the Maintenance Depots and Buses, as the case may be, to enable the Operator to cure the Operator Default hereunder.

31.4 Termination

31.4.1 At any time during the period of Suspension under this Article 31, the Operator may by notice require the Authority to revoke the Suspension and issue a Termination Notice. The Authority shall, within 15 (fifteen) days of receipt of such notice, terminate this Agreement under and in accordance with Article 32 as if it is an Operator Default under Clause 32.1.

31.4.2 Notwithstanding anything to the contrary contained in this Agreement, and in the absence of any mutual agreement between the Parties to the contrary, in the event that Suspension is not revoked within 180 (one hundred and eighty) days from the date of Suspension hereunder, the Agreement shall, upon expiry of the aforesaid period, be deemed to have been terminated by mutual agreement of the Parties and all the provisions of this Agreement shall apply, *mutatis mutandis*, to such Termination as if a Termination Notice had been issued by the Authority upon occurrence of an Operator Default.

Article 32 TERMINATION

32.1 Termination for Operator Default

32.1.1 Save as otherwise provided in this Agreement, in the event that any of the defaults specified below shall have occurred, and the Operator fails to cure the default within the Cure Period set forth below, or where no Cure Period is specified, then within a Cure Period of 120 (one hundred and twenty) days, the Operator shall be deemed to be in default of this Agreement (an "Operator Default"), unless the default has occurred as a result of any breach of this Agreement by the Authority, the Authority's Representative or due to Force Majeure. The defaults referred to herein shall mean and include the following:

(a) The Performance Security has been encashed and appropriated in accordance with Clause 9.2, and the Operator fails to replenish or provide fresh Performance Security, within a Cure Period of 30 (thirty) days;

(b) subsequent to the replenishment or furnishing of fresh Performance Security in accordance with Clause 9.2, the Operator fails to cure, within a Cure Period of 120 (one hundred and twenty) days, the Operator Default for which whole or part of the Performance Security was appropriated;

(c) the Operator fails to complete the Fit Out Works for the Maintenance Depots within 270 (two hundred and seventy) days from the Scheduled Maintenance Depot Completion Date, as may be extended in accordance with the terms of this Agreement;

(d) the Operator fails to supply the Prototype within the period specified in Clause 13.6;

(e) the Operator fails to procure and deliver the Buses in accordance with the Delivery Schedule and the amount of Damages payable by the Operator for such delay exceeds the maximum amount specified in Clause 13.9.2.

(f) the Operator is in material breach of the Maintenance Requirements or the Safety Requirements, as the case may be;

(g) the Operator is in breach of its obligations under Clause 19.7;

(h) the Operator has failed to make any payment to the Authority within the period specified in this Agreement and the Authority is unable to set-off such amounts from amounts due from it to the Operator in accordance with the terms of this Agreement;

(i) a failure by the Operator to achieve the Key Performance Indicators set out in Clauses 20.2 and 20.4 to 20.7 such that the Damages payable by the Operator for such failure exceeds the maximum amount specified in Clause 20.11 in any 6 (six) consecutive months or for aggregated 18 months during the period of the Agreement;

(j) a failure by the Operator to achieve the Key Performance

Indicators set out in Clause 20.3 such that the Damages payable by the Operator for such failure exceeds the maximum amount specified in Clause 20.11 for 3 (three) consecutive months;

(k) a material breach of any of the Project Agreements by the Operator has caused a Material Adverse Effect on the Authority;

(l) the Operator creates any Encumbrance in breach of this Agreement;

(m) the Operator repudiates this Agreement (or any part thereof) or otherwise takes any action or evidences or conveys an intention not to be bound by the Agreement (or any part thereof);

(n) a Change in Ownership has occurred in breach of the provisions of Clause 5.3;

(o) there is a transfer, pursuant to law either of (i) the rights and/or obligations of the Operator under any of the Project Agreements, or of (ii) all or part of the assets or undertaking of the Operator, and such transfer causes a Material Adverse Effect on the Authority;

(p) an execution levied on any of the assets of the Operator has caused a Material Adverse Effect on the Authority;

(q) the Operator is adjudged bankrupt or insolvent, or if a trustee or receiver is appointed for the Operator or for the whole or material part of its assets that has a material bearing on the Project;

(r) the Operator suffers an Insolvency Event;

(s) The Operator has been, or is in the process of being amalgamated or reconstituted in a manner that would cause, in the reasonable opinion of the Authority, a Material Adverse Effect provided that, the same shall not be considered to be an Operator Default if, as part of such amalgamation or reconstruction, the entire property, assets and undertaking of the Operator are transferred to the amalgamated or reconstructed entity and that the amalgamated or reconstructed entity has unconditionally assumed the obligations of the Operator under this Agreement and the Project Agreements; and provided that:

(i) the amalgamated or reconstructed entity has the capability and operating experience necessary for the performance of its obligations under this Agreement and the Project Agreements;

(ii) the amalgamated or reconstructed entity has the financial standing to perform its obligations under this Agreement and the Project Agreements and has a credit worthiness at least as good as that of the Operator as at the Appointed Date; and

(iii) each of the Project Agreements remains in full force and effect;

(t) any representation or warranty of the Operator herein contained which is, as of the date hereof, found to be materially false or the Operator is at any time hereafter found to be in breach thereof;

(u) the Operator submits to the Authority any false statement, notice or other document, in written or electronic form, which has a

Material Adverse Effect on the Authority;

(v) the Operator has failed to fulfil any obligation, for which failure Termination has been specified in this Agreement; or

(w) a Suspension of this Agreement pursuant to Clause 31 (to the extent such Suspension is directly attributable to the Operator) for a period exceeding 180 (one hundred and eighty) days;

(x) the Operator commits a default in complying with any other provision of this Agreement if such default causes a Material Adverse Effect on the Authority and the Operator fails to cure such default in a Cure Period of 120 (one hundred and twenty) days.

32.1.2 Without prejudice to any other rights or remedies which the Authority may have under this Agreement, upon occurrence of an Operator Default, the Authority shall be entitled to terminate this Agreement by issuing a Termination Notice to the Operator; provided that before issuing the Termination Notice, the Authority shall by a notice inform the Operator of its intention to issue such Termination Notice and grant 15 (fifteen) days to the Operator to make a representation, and may after the expiry of such 15 (fifteen) days, whether or not it is in receipt of such representation at its sole discretion, issue the Termination Notice subject to the provisions of Clause 32.1.3.

32.1.3 The Authority shall, if there be Senior Lenders, send a copy of its notice of intention to issue a Termination Notice referred to in Clause 31.12 to inform the Lenders' Representative and grant 15 (fifteen) days to the Lenders' Representative, for making a representation on behalf of the Senior Lenders stating the intention to substitute the Operator in accordance with the Substitution Agreement. In the event the Authority receives such representation on behalf of Senior Lenders, it shall, in its discretion, either withhold Termination for a period not exceeding 180 (one hundred and eighty) days from the date of such representation or exercise its right of Suspension, as the case may be, for enabling the Lenders' Representative to exercise the Senior Lenders' right of substitution in accordance with the Substitution Agreement:

Provided that the Lenders' Representative may, instead of exercising the Senior Lenders' right of substitution, (i) procure that the default specified in the notice is cured within the aforesaid period of 180 (one hundred and eighty) days, and upon such curing thereof, the Authority shall withdraw its notice referred to above and restore all the rights of the Operator, or (ii) issue a notice to the Authority requiring it to terminate the Agreement, and upon such notice being issued, the Authority shall, forthwith, immediately terminate this Agreement.

Provided further that upon written request from the Lenders' Representative and the Operator, the Government shall extend the aforesaid period of 180 (one hundred and eighty) days by such further period not exceeding 90 (ninety) days, as the Authority may deem appropriate.

32.2 Termination for Authority Default

32.2.1 In the event that any of the defaults specified below shall have occurred, and the Authority fails to cure such default within a Cure Period of 90 (ninety) days or such longer period as has been expressly provided in this Agreement, the Authority shall be deemed to be in default of this Agreement (the "Authority Default") unless the default has occurred as a result of any breach of this Agreement by the Operator or due to Force Majeure. The defaults referred to herein shall mean and include the following:

(a) the Authority commits a material default in complying with any of the provisions of this Agreement and such default has a Material Adverse Effect on the Operator;
(b) the Authority has failed to make any payments to the Operator in accordance with the provisions of this Agreement.
(c) the Authority fails to provide the Right of Way to the Depot Sites in accordance with the terms of this Agreement;
(d) an assignment by the Authority, of its rights, interests and obligations under this Agreement in contravention of Clause 35.5; or
(e) the Authority repudiates this Agreement or otherwise takes any action that amounts to or manifests an irrevocable intention not to be bound by this Agreement.

32.2.2 Without prejudice to any other right or remedy which the Operator may have under this Agreement, upon occurrence of an Authority Default, the Operator shall be entitled to terminate this Agreement by issuing a Termination Notice to the Authority; provided that before issuing the Termination Notice, the Operator shall by a notice inform the Authority of its intention to issue the Termination Notice and grant 15 (fifteen) days to the Authority to make a representation, and may after the expiry of such 15 (fifteen) days, whether or not it is in receipt of such representation, issue the Termination Notice.

32.3 Termination Payment

32.3.1 Upon Termination on account of an Operator Default after COD, the Authority shall pay to the Operator, by way of Termination Payment, an amount equal to:

(a) 90% (ninety per cent) of the Debt Due less Insurance Cover; and
(b) 70% (seventy per cent) of the amount representing the Additional Termination Payment.

Provided that if any insurance claims forming part of the Insurance Cover are not admitted and paid, then 80% (eighty per cent) of such unpaid claims shall be included in the computation of Debt Due.

Provided further that, in computing the Termination Payment due to the Operator, the Authority shall deduct an amount equal to any Subsidy and Government Fiscal Assistance received by the Operator from the Authority.

Further, upon Termination on account of an Operator Default prior to the Lot COD of the first Lot of Buses, the Authority shall have the right to take over

the Fit Out Works in progress in which case it shall pay to the Operator an amount equal to actual capital cost of the Fit Out Works completed by the Operator up until the date of Termination as verified by Authority.

32.3.2 Upon Termination on account of an Authority Default at any time after the Appointed Date, the Authority shall pay to the Operator, by way of Termination Payment, an amount equal to:

(a) Debt Due;
(b) 150% (one hundred and fifty per cent) of the Adjusted Equity; and
(c) 115% (one hundred and fifteen per cent) of the amount representing the Additional Termination Payment.

It is further clarified that in case of termination on account of an Authority Default, the Authority shall return the Performance Security available with it at the time. (if not already released)

32.3.3 Termination Payment shall become due and payable to the Operator within 60 (sixty) days of a demand being made by the Operator to the Authority with the necessary particulars, and in the event of any delay, the Authority shall pay interest at a rate equal to 3% (three per cent above the Bank Rate on the amount of Termination Payment remaining unpaid; provided that such delay shall not exceed 90 (ninety) days of a demand being made by the Operator to the Authority with the necessary particulars; provided further that liability of the Authority to make the Termination Payment hereof is subject to the fulfilment of the Divestment Requirements in accordance with the provisions of Article 33 of this Agreement. For the avoidance of doubt, it is expressly agreed that Termination Payment shall constitute full discharge by the Authority of its payment obligations in respect thereof hereunder.

32.3.4 Upon Termination on expiry of the Concession Period by efflux of time, no Termination Payment shall be due and payable to the Operator; provided that in the event any Project Assets shall have been acquired and installed after the 5th (fifth) anniversary of the COD, with prior written consent of the Authority, which consent shall not be unreasonably denied, a Termination Payment equal to 80% (eighty percent) of the Adjusted Depreciated Value of such assets and equipment shall be deemed to be Debt Due for the purposes of Termination Payment. Provided that, any Project Assets acquired by the Operator without the prior written consent of the Authority shall not be taken into account when calculating the Termination Payment under this Clause 32.3.4 and such Project Assets shall remain the property of the Operator after Termination and the Operator may dispose of such Project Assets as it deems fit.

32.3.5 The Operator expressly agrees that Termination Payment under this Article 32 shall constitute a full and final settlement of all claims of the Operator on account of Termination of this Agreement for any reason whatsoever and that the Operator or any shareholder thereof shall not have any further right or claim under any law, treaty, convention, contract or otherwise.

32.4 Certain limitations on Termination Payment

32.4.1 Termination Payment, not being Additional Termination Payment, due and payable under this Agreement shall be limited to the Debt Due and Adjusted Equity, as the case may be, which form part of the Total Project Cost in accordance with the provisions of this Agreement; provided that the amount payable in respect of any Debt Due expressed in foreign currency shall be computed at the Reference Exchange Rate for conversion into the relevant foreign currency as on the date of Termination Payment. For the avoidance of doubt, it is agreed that within a period of 60 (sixty) days from COD, the Operator shall notify to the Authority, the Total Project Cost as on COD and its disaggregation between Debt Due and Equity, and only the amounts so conveyed shall form the basis of computing Termination Payment, and it is further agreed that in the event such disaggregation is not notified to the Authority, Equity shall be deemed to be the amount arrived at by subtracting Debt Due from Total Project Cost. The Parties also agree that for the purposes of computing Termination Payment, the Debt Due shall at no time exceed 70 % (seventy per cent) of the Total Project Cost.

32.4.2 The Operator may only construct, acquire or install any Specified Assets after the 5th (fifth) anniversary of COD, but before the 10th (tenth) anniversary thereof (and excluding land), with the prior written consent of the Authority and which consent shall not be unreasonably withheld by the Authority. Provided that, any Project Assets constructed, acquired or installed by the Operator without the prior written consent of the Authority shall not be taken into account when calculating any "**Additional Termination Payment**" due to the Operator under this Article 32 and such Project Assets shall remain the property of the Operator after Termination and the Operator may dispose of such Project Assets as it deems fit.

32.5 Other rights and obligations of the Authority

Upon Termination for any reason whatsoever, the Authority shall:

(a) take possession and control of the Buses, provided that the Termination has occurred after COD;

(b) take possession and control of the Maintenance Depots (including the Charging Infrastructure) forthwith;

(c) take possession and control of all materials, stores, implements, plants and equipment on or about the Maintenance Depots;

(d) be entitled to restrain the Operator and any person claiming through or under the Operator from entering upon the Maintenance Depots or any part of the Authority's premises;

(e) require the Operator to comply with the Divestment Requirements set forth in Clause 33.1; and

(f) succeed upon election by the Authority, without the necessity of any further action by the Operator, to the interests of the Operator under such of the Project Agreements as the Authority may in its discretion deem appropriate, and shall upon such election be liable to the Contractors only for compensation accruing and becoming due and payable to them under the terms of their

respective Project Agreements from and after the date the Authority elects to succeed to the interests of the Operator. For the avoidance of doubt, the Operator acknowledges and agrees that all sums claimed by such Contractors as being due and owing for works and services performed or accruing on account of any act, omission or event prior to such date shall constitute debt between the Operator and such Contractors, and the Authority shall not in any manner be liable for such sums. It is further agreed that in the event the Authority elects to cure any outstanding defaults under such Project Agreements, the amount expended by the Authority for this purpose shall be deducted from the Termination Payment.

32.6 Survival of rights and obligations

Notwithstanding anything to the contrary contained in this Agreement, but subject to the provisions of Clause 32.3.5, any Termination pursuant to the provisions of this Agreement shall be without prejudice to the accrued rights of either Party including its right to claim and recover money damages, insurance proceeds, security deposits, and other rights and remedies, which it may have in law or contract. All rights and obligations of either Party under this Agreement, including but not limited to Termination Payments, Divestment Requirements, shall survive the Termination to the extent such survival is necessary for giving effect to such rights and obligations.

Article 33 DIVESTMENT OF RIGHTS AND INTEREST

33.1 Divestment requirements upon expiry of the Concession Period

33.1.1 Upon expiry of the Concession Period, the Operator shall comply with and conform to the following divestment requirements (the "Divestment Requirements"), no later than 15 (fifteen) days from the date of expiry of the Concession Period:

(a) remove all its personnel and vacate and deliver forthwith the actual or constructive possession of the Maintenance Depot along with the infrastructure therein and any Opportunity Charging Stations, free and clear of all Encumbrances;

(b) cure the equipment at the Maintenance Depot, Charging Infrastructure and Opportunity Charging Stations (if applicable) of any defect or deficiency such that it can continue to be used efficiently and economically in accordance with Good Industry Practice, provided that if such defects and deficiencies have arisen on account of accidents, vandalism, arson, riot or natural calamity occurring (in each case for reasons not directly attributable to the Operator) no earlier than 120 (one hundred and twenty) days prior to the expiry of the Concession Period, the Authority shall grant to the Operator such additional time, not exceeding 240 (two hundred forty) days from the date of expiry of the Concession Period, as may be reasonably required for repair and rectification thereof;

(c) provide to the Authority a license or sub-license, free of any Encumbrances, with respect to all Intellectual Property pertaining to the Maintenance Depot, the Charging Infrastructure and the Opportunity Charging Stations, if any, including transferring all relevant records, reports, software (including software codes) and manuals, and complete 'as built' Drawings as on the Transfer Date so as to enable the Authority to operate and maintain the Maintenance Depot, the Charging Infrastructure and the Opportunity Charging Stations, and execute such deeds of conveyance, documents and other writings as the Authority may reasonably require in connection therewith. For the avoidance of doubt, the Operator represents and warrants that the Intellectual Property shall be adequate and complete for the operation and maintenance of the Maintenance Depot, the Charging Infrastructure and Opportunity Charging Stations;

(d) transfer and/or deliver to the Authority all Applicable Permits in respect of the Maintenance Depot, the Charging Infrastructure and Opportunity Charging Stations, if any, to the extent permissible under Applicable Laws;

(e) execute such deeds of conveyance, documents and other writings as the Authority may reasonably require for conveying, divesting and assigning all the rights, title and interest of the

Operator in respect of the outstanding insurance claims to the extent due and payable to the Authority;

(f) execute such deeds of conveyance, documents and other writings as the Authority may reasonably require for conveying, divesting and assigning all the rights, title and interest of the Operator in the Maintenance Depot, the Charging Infrastructure and the Opportunity Charging Stations, if any; and

(g) comply with all other requirements as may be prescribed or required under Applicable Laws for completing the divestment and assignment of all rights, title and interest of the Operator in the Maintenance Depot, the Charging Infrastructure and the Opportunity Charging Stations, if any, and Insurance Cover, free from all Encumbrances, absolutely unto the Authority or to its nominee.

33.2 Inspection and cure

Not earlier than 90 (ninety) days prior to expiry of the Concession Period, but not later than [15 (fifteen)] days prior to the effective date of such expiry, the Authority shall verify, after giving due notice to the Operator specifying the time, date and place of such verification and/or inspection, compliance by the Operator with the Maintenance Obligations, and if required, cause appropriate tests to be carried out at the Operator's cost for this purpose. The Operator shall at its own cost and expense, cure defaults if any, in the Maintenance Obligations and the provisions of Article 32 shall apply, *mutatis mutandis*, in relation to curing of defects or deficiencies under this Article 33.

33.3 Cooperation and assistance on transfer of Maintenance Depot

33.3.1 The Parties shall cooperate on a best effort basis and take all necessary measures, in good faith, to achieve a smooth transfer of the assets specified in Clause 33.1.1 in accordance with the provisions of this Agreement so as to protect the safety of and avoid undue delay or inconvenience to the Users, other members of the public or the lawful occupiers of any part of the Depot Sites.

33.3.2 The Authority shall have the option to purchase or hire from the Operator at a fair market value and free from any Encumbrance all or any part of the plant and machinery used in connection with the Project but which does not form part of the assets specified in Clause
33.1.1 and is reasonably required in connection with operation of the Maintenance Depot. For the avoidance of doubt, in the event of Dispute or difference relating to the determination of the fair market value of such plant and machinery, the Dispute Resolution Procedure shall apply.

33.4 Divestment requirements upon termination

33.4.1 Upon Termination after COD and before the expiry of the Concession Period, the Operator shall comply with and conform to the following divestment

requirements (the "Divestment Requirements"), no later than 15 (fifteen) days from the date of Termination:

(a) procure and deliver forthwith title to, and actual or constructive possession of the Buses and vacate and handover actual or constructive possession of the Maintenance Depot, the Charging Infrastructure and the Opportunity Charging Stations, if any, free and clear of all Encumbrances;

(b) cure the Maintenance Depot, all Buses, Charging Infrastructure and Opportunity Charging Stations, if any, of all defects and deficiencies so that the Maintenance Depot, Buses, Charging Infrastructure and Opportunity Charging Stations are compliant with the Maintenance Obligations; provided that if such defects and deficiencies have arisen on account of accidents, vandalism, arson, riot or natural calamity occurring no earlier than 120 (one hundred and twenty) days prior to such Termination, the Authority shall grant to the Operator such additional time, not exceeding 240 (two hundred forty) days from the date of expiry of the Concession Period, as may be reasonably required for repair and rectification thereof;

(c) provide to the Authority a license or sub-license, free of any Encumbrances, with respect to all Intellectual Property pertaining to the Buses, Maintenance Depot, Charging Infrastructure and Opportunity Charging Stations including transferring all relevant records, reports, software and manuals and complete 'as built' Drawings as on the Transfer Date so as to enable the Authority to operate and maintain the Buses, Maintenance Depot, Charging Infrastructure and Opportunity Charging Stations and execute such deeds of conveyance, documents and other writings as the Authority may reasonably require in connection therewith. For the avoidance of doubt, the Operator represents and warrants that the Intellectual Property shall be adequate and complete for the Operation and Maintenance of the Buses, Maintenance Depot, Charging Infrastructure and Opportunity Charging Stations and shall be assigned or licensed to the Authority free of any Encumbrance for the operational life of these assets;

(d) transfer and/or deliver to the Authority all Applicable Permits in respect of the Buses, Maintenance Depot, Charging Infrastructure and Opportunity Charging Stations to the extent permissible under Applicable Laws;

(e) take all necessary steps to safeguard and protect the Buses, the Charging Infrastructure, the Opportunity Charging Stations, if any, the Maintenance Depot and all other equipment, materials and goods on the Depot Site;

(f) execute such deeds of conveyance, documents and other writings as the Authority may reasonably require for conveying, divesting and assigning all the rights, title and interest of the

Operator in respect of the outstanding insurance claims to the extent due and payable to the Authority;

(g) execute such deeds of conveyance, documents and other writings as the Authority may reasonably require for conveying, divesting and assigning all the rights, title and interest of the Operator in the Buses, Maintenance Depot, Charging Infrastructure and Opportunity Charging Stations; and

(h) comply with all other requirements as may be prescribed or required under Applicable Laws for completing the divestment and assignment of all rights, title and interest of the Operator in the Buses, Maintenance Depot, Charging Infrastructure and Opportunity Charging Stations free from all Encumbrances, absolutely unto the Authority or to its nominee.

33.4.2 Subject to the exercise by the Authority of its rights under this Agreement or any of the Project Agreements to perform or procure the performance by a third party of any of the obligations of the Operator, the Parties shall continue to perform their obligations under this Agreement notwithstanding the giving of any Termination Notice until the Termination of this Agreement becomes effective in accordance with its terms.

33.4.3 Upon Termination of this Agreement prior to the Lot COD of the First Lot of Buses, if the Authority exercises its right to take over the Fit Out Works, the Operator shall be required to handover peaceful possession of the Depot Sites and any Fit Out Works to the Authority no later than 15 (fifteen) days from the date of Termination. If the Authority chooses not to take over the Fit Out Works, the Operator shall clear the Depot Site(s) and handover vacant, peaceful possession of the Depot Site(s) to the Authority no later than 30 (thirty) days from the date of Termination.

33.5 Vesting Certificate

The divestment of all rights, title and interest in the assets specified in Clause 33.1.1 shall be deemed to be complete on the date on which all of the Divestment Requirements have been fulfilled, and the Authority shall, without unreasonable delay, thereupon issue a certificate substantially in the form set forth in Schedule-O (the "**Vesting Certificate**"), which will have the effect of constituting evidence of divestment by the Operator of all of its rights, title and interest in such assets, and their vesting in the Authority pursuant hereto. It is expressly agreed that any defect or deficiency in the Divestment Requirements shall not in any manner be construed or interpreted as restricting the exercise of any rights by the Authority or its nominee , or in respect of, the Buses and Maintenance Depot; on the footing that all Divestment Requirements have been complied with by the Operator.

33.6 Divestment costs etc.

33.6.1 Upon expiry of the Concession Period, the Authority shall bear and pay, all costs incidental to divestment of all of the rights, title and interest of the

Operator in the Maintenance Depot, Charging Infrastructure and the Opportunity Charging Stations, if any, in favour of the Authority. It is further clarified that Authority will not reimburse/ bear and pay the capital cost of any of the assets which are to be transferred to the Authority.

33.6.2 In the event of Termination attributable to the Operator, the Operator shall bear and pay all costs incidental to divestment of all of the rights, title and interest of the Operator in the Buses, Maintenance Depot, Charging Infrastructure and Opportunity Charging Stations, if any, in favour of the Authority upon such Termination.

33.6.3 In the event of Termination attributable to the Authority, the Authority shall bear and pay all costs incidental to divestment of all of the rights, title and interest of the Operator in the Buses, Maintenance Depot, Charging Infrastructure and Opportunity Charging Stations, if any, in favour of the Authority upon such Termination. It is further clarified that Authority will not reimburse the capital cost of any of the assets which are to be transferred to the Authority.

33.6.4 In the event of any Dispute relating to matters covered by and under this Article 33, the Dispute Resolution Procedure shall apply.

Article 34 DEFECTS LIABILITY AFTER TERMINATION

34.1 Liability for defects after Termination

Subject to Clause 33.4.1. (b), the Operator shall be responsible for all defects and deficiencies in the Buses, Maintenance Depot, Charging Infrastructure and Opportunity Charging Stations, if any, for a period of within 180 (one hundred and eighty) days after Termination, and it shall have the obligation to repair or rectify, at its own cost, all defects and deficiencies observed by the Authority in the Buses, Maintenance Depot, Charging Infrastructure and Opportunity Charging Stations during the aforesaid period. In the event that the Operator fails to repair or rectify such defect or deficiency within a period of 15 (fifteen) days from the date of notice issued by the Authority in this behalf, the Authority shall be entitled to get the same repaired or rectified at the Operator's risk and cost. All costs incurred by the Authority hereunder shall be reimbursed by the Operator to the Authority within 15 (fifteen) days of receipt of demand thereof, and in the event of default in reimbursing such costs, the Authority shall be entitled to recover the same from the Escrow Account.

34.2 Retention in Escrow Account

34.2.1 Notwithstanding anything to the contrary contained in this Agreement, but subject to the provisions of Clause 34.2.3, a sum equal to 10% (ten per cent) of the total Fee in respect of the Contract Year immediately preceding the Transfer Date shall be retained by the Authority for a period of 180 (one hundred and eighty) days after Termination for meeting the liabilities, if any, arising out of or in connection with the provisions of Clause 34.1.

34.2.2 Without prejudice to the provisions of Clause 34.2.1, the Authority shall carry out an inspection of the Buses, Maintenance Depot, Charging Infrastructure and Opportunity Charging Stations, if any, at any time between 180 (one hundred and eighty) and 15 (fifteen) days prior to the Transfer Date and if it determines that the status of the Buses, Maintenance Depot, Charging Infrastructure or Opportunity Charging Stations is such that a sum larger than the amount stipulated in Clause 34.2.1 should be retained by the Authority and for a period longer than the aforesaid 180 (one hundred and eighty) days, the amount so determined, subject to a ceiling equivalent to twice the amount specified in Clause 34.2.1 shall be retained by the Authority for a period not exceeding 240 (two hundred and forty) days.

34.2.3 The Operator may, for the performance of its obligations under this Article 34, provide to the Authority a guarantee from a Bank for a sum equivalent to the amount determined under Clause 34.2.1 or 34.2.2, as the case may be, and for the period specified therein, substantially in the form set forth in Schedule-D (the "**Defects Performance Security**"), to be modified, *mutatis mutandis*, for this purpose, and the Authority shall, without prejudice to its other rights and remedies hereunder or in law, be entitled to encash and appropriate the required amounts from the Defects Performance Security for undertaking the repairs or rectification at the Operator's risk and cost in

accordance with the provisions of this Article

34. Upon furnishing of a Performance Security under this Clause 34.2.3, the retention of funds in terms of Clause 34.2.1 or 34.2.2, as the case may be, shall be dispensed with.

Part VI Other Provisions

Article 35 ASSIGNMENT AND CHARGES

35.1 Legal and Beneficial Rights of Project Assets

35.1.1 The Operator shall have legal and beneficial right of use, of the Project Assets during the Concession Period and up until the divestment of its rights in the Project Assets in accordance with Article 33.

35.2 Restrictions on assignment and charges

35.2.1 Subject to Clause 35.3, this Agreement shall not be assigned by the Operator to any person, save and except with the prior consent in writing of the Authority.

35.2.2 Subject to the provisions of Clause 35.3, the Operator shall not create nor permit to subsist any Encumbrance, or otherwise transfer or dispose of all or any of its rights and benefits under this Agreement or any Project Agreement to which the Operator is a party except with prior consent in writing of the Authority, which consent the Authority shall be entitled to decline without assigning any reason.

35.3 Permitted assignment and charges

The restraints set forth in Clause 35.2 shall not apply to: liens arising by operation of law (or by an agreement evidencing the same) in the ordinary course of business of the Operator; mortgages/pledges/hypothecation of goods/assets, and their related documents of title, other than Project Assets, arising or created in the ordinary course of business of the Operator, and as security only for indebtedness to the Senior Lenders under the Financing Agreements and/or for working capital arrangements for the Project; assignment of rights, interest and obligations of the Operator to or in favour of the Lenders' Representative as nominee and for the benefit the Senior Lenders, to the extent covered by and in accordance with the Substitution Agreement as security for financing provided by the Senior Lenders under the Financing Agreements; and

(a) retention of title and ownership of the Buses by the Lessors, if any;
(b) liens or encumbrances required by any Applicable Law.
(c) subcontracting limited to operations of the buses; and
(d) any assignment of Insurance Policy in favour of Lenders as per the Financing Agreements.

35.4 Substitution Agreement

35.4.1 The Lenders' Representative, on behalf of Senior Lenders, or Lessor(s) if any may exercise the right to substitute the Operator pursuant to the agreement for substitution of the Operator (the "Substitution Agreement") to be entered into amongst the Operator, the Authority and the Lenders' Representative, on behalf of Senior Lenders, substantially in the form set forth in Schedule-R.

35.4.2 Upon substitution of the Operator under and in accordance with the

Substitution Agreement, the Nominated Company substituting the Operator shall be deemed to be the Operator under this Agreement and shall enjoy all rights and be responsible for all obligations of the Operator under this Agreement as if it was the Operator; provided that where the Operator is in breach of this Agreement on the date of such substitution, the Authority shall by notice grant a Cure Period of 120 (one hundred and twenty) days to the Operator for curing such breach without prejudice to its rights and remedies available under law for such breach by the Operator.

35.5 Assignment by the Authority

Notwithstanding anything to the contrary contained in this Agreement, the Authority may, after giving 60 (sixty) days' notice to the Operator, assign and/ or transfer any of its rights and benefits and/or obligations under this Agreement to an assignee. The assignee thereafter shall enjoy all rights and be responsible for all obligations of the Authority under this Agreement as if it was the Authority; provided that where the Authority is in breach of this Agreement on the date of such assignment, the Operator shall by notice grant a Cure Period of 120 (one hundred and twenty) days to the Authority for curing such breach without prejudice to its rights and remedies available under law for such breach by the Authority

Article 36 CHANGE IN LAW

36.1 Increase in costs

If as a result of Change in Law, the Operator suffers an increase in costs or reduction in net after-tax return or other financial burden, the Operator may so notify the Authority. Upon the issuance of a notice by the Operator, the Parties shall meet, as soon as reasonably practicable but no later than 30 (thirty) days from the date of notice, and either agree on any amendments to this Agreement or on any other mutually agreed arrangement by which the Authority will compensate the Operator.

Provided that if no agreement is reached within 90 (ninety) days of the aforesaid notice, the Operator may by notice require the Authority to pay an amount that would place the Operator in the same financial position that it would have enjoyed had there been no such Change in Law, and within 15 (fifteen) days of receipt of such notice, along with particulars thereof, the Authority shall pay the amount specified therein; provided that if the Authority shall dispute such claim of the Operator, the same shall be settled in accordance with the Dispute Resolution Procedure. For the avoidance of doubt, it is agreed that this Clause 36.1 shall be restricted to changes in law directly affecting the Operator's costs of performing its obligations under this Agreement.

36.2 Reduction in costs

If as a result of Change in Law, the Operator benefits from a reduction in costs or increase in net after-tax return or other financial gains, the Authority may so notify the Operator and propose amendments to this Agreement so as to place the Operator in the same financial position as it would have enjoyed had there been no such Change in Law resulting in decreased costs, increase in return or other financial gains as aforesaid. Upon notice by the Authority, the Parties shall meet, as soon as reasonably practicable but no later than 30 (thirty) days from the date of notice, and either agree on such amendments to this Agreement or on any other mutually agreed arrangement.

Provided that if no agreement is reached within 90 (ninety) days of the aforesaid notice, the Authority may by notice require the Operator to pay an amount that would place the Operator in the same financial position that it would have enjoyed had there been no such Change in Law, and within 15 (fifteen) days of receipt of such notice, along with particulars thereof, the Operator shall pay the amount specified therein to the Authority; provided that if the Operator shall dispute such claim of the Authority, the same shall be settled in accordance with the Dispute Resolution Procedure. For the avoidance of doubt, it is agreed that this Clause 36.2 shall be restricted to changes in law directly affecting the Operator's costs of performing its obligations under this Agreement.

36.3 Protection of NPV

Pursuant to the provisions of Clauses 36.1 and 36.2 and for the purposes of placing the Operator in the same financial position as it would have enjoyed had there been no Change in Law affecting the costs, returns or other financial burden or gains, the Parties shall endeavour to establish a net present value (the "**NPV**") of the net cash flow and make necessary adjustments in costs, revenues, compensation or other relevant parameters, as the case may be, to procure that the NPV of the net cash flow is the same as it would have been if no Change in Law had occurred. For the avoidance of doubt, the Parties expressly agree that for determination of NPV, the discount rate to be used shall be equal to the weighted average rate of interest at which the Operator has raised its debt under its Financing Agreements.

36.4 Restriction on cash compensation

The Parties acknowledge and agree that the demand for cash compensation under this Article 36 shall be restricted to the effect of Change in Law during the respective Accounting Year and shall be made at any time after commencement of such year, but no later than 1 (one) year from the close of such Accounting Year. Any demand for cash compensation payable for and in respect of any subsequent Accounting Year shall be made after the commencement of such Accounting Year to which the demand pertains, but no later than 2 (two) years from the close of such Accounting Year.

Article 37 LIABILITY AND INDEMNITY

37.1 General indemnity

37.1.1 The Operator shall indemnify, defend, save and hold harmless the Authority and its officers, servants, agents, Government Instrumentalities and Authority owned and/or controlled entities/enterprises, (the "Authority Indemnified Persons") from and against any and all suits, proceedings, actions, demands and third party claims for any loss, damage, cost and expense of whatever kind and nature, whether arising out of any breach by the Operator of any of its obligations under this Agreement or any related agreement or on account of any defect or deficiency in the provision of goods and services by the Operator to the Authority or to any person or from any negligence of the Operator under contract or tort or on any other ground whatsoever, except to the extent that any such suits, proceedings, actions, demands and claims have arisen due to any negligent act or omission, a breach or default of this Agreement or any related agreement and/or a breach of its statutory duty on the part of the Authority Indemnified Persons.

37.1.2 The Authority shall indemnify, defend, save and hold harmless the Operator and its officers, servants and agents (the "**Operator Indemnified Parties**") against any and all suits, proceedings, actions, demands and third party claims for any loss, damage, cost and expense of whatever kind and nature arising out of (a) defect in title and/or the rights of the Authority in the land comprised in the Depot Sites, and/or (b) breach by the Authority of any of its obligations under this Agreement or any related agreement, which materially and adversely affect the performance by the Operator of its obligations under this Agreement, save and except that where any such claim, suit, proceeding, action, and/or demand has arisen due to a negligent act or omission, or breach of any of its obligations under any provision of this Agreement or any related agreement and/or breach of its statutory duty on the part of the Operator, its subsidiaries, affiliates, Contractors, servants or agents, the same shall be the liability of the Operator.

37.2 Indemnity by the Operator

37.2.1 Without limiting the generality of Clause 37.1, the Operator shall fully indemnify, hold harmless and defend the Authority and the Authority Indemnified Persons from and against any and all loss and/or damages arising out of or with respect to:

(a) failure of the Operator to comply with Applicable Laws and Applicable Permits; payment of taxes required to be made by the Operator in respect of the income or other taxes of the Operator's Contractors, suppliers and representatives; or

(b) non-payment of amounts due as a result of materials or services furnished to the Operator or any of its Contractors which are payable by the Operator or any of its Contractors.

37.2.2 Without limiting the generality of the provisions of this Article 37, the

Operator shall fully indemnify, hold harmless and defend the Authority Indemnified Persons from and against any and all suits, proceedings, actions, claims, demands, liabilities and damages which the Authority Indemnified Persons may hereafter suffer, or pay by reason of any demands, claims, suits or proceedings arising out of claims of infringement of any domestic or foreign Intellectual Property or confidentiality rights with respect to any materials, information, design or process used by the Operator or by the Operator's Contractors in performing the Operator's obligations or in any way incorporated in or related to the Project. If in any such suit, action, claim or proceedings, a temporary restraint order or preliminary injunction is granted, the Operator shall make every reasonable effort to secure the revocation or suspension of the injunction or restraint order. If, in any such suit, action, claim or proceedings, the Maintenance Depot, Buses, Charging Infrastructure or Opportunity Charging Stations, if any, as the case may be, or any part thereof or comprised therein, are held to constitute an infringement and their use is permanently enjoined, the Operator shall promptly make every reasonable effort to secure for the Authority a licence, at no cost to the Authority, authorizing continued use of the infringing work. If the Operator is unable to secure such licence within a reasonable time, the Operator shall, at its own expense, and without impairing the Specifications and Standards, either replace the affected work, or part, or process thereof with non-infringing work or part or process, or modify the same so that they become non-infringing.

37.3 Notice and contest of claims

In the event that either Party receives a claim or demand from a third party in respect of which it is entitled to the benefit of an indemnity under this Article 37 (the "**Indemnified Party**") it shall notify the other Party (the "**Indemnifying Party**") within 15 (fifteen) days of receipt of the claim or demand and shall not settle or pay the claim without the prior approval of the Indemnifying Party, which approval shall not be unreasonably withheld or delayed. In the event that the Indemnifying Party wishes to contest or dispute the claim or demand, it may conduct the proceedings in the name of the Indemnified Party, subject to the Indemnified Party being secured against any costs involved, to its reasonable satisfaction.

37.4 Defence of claims

37.4.1 The Indemnified Party shall have the right, but not the obligation, to contest, defend and litigate any claim, action, suit or proceeding by any third party alleged or asserted against such Party in respect of, resulting from, related to or arising out of any matter for which it is entitled to be indemnified hereunder, and reasonable costs and expenses thereof shall be reimbursed by the Indemnifying Party. If the Indemnifying Party acknowledges in writing its obligation to indemnify the Indemnified Party in respect of loss to the full extent provided by this Article 37, the Indemnifying Party shall be entitled, at its option, to assume and control the defence of such claim, action, suit or proceeding, liabilities, payments and obligations at its expense and through

the counsel of its choice; provided it gives prompt notice of its intention to do so to the Indemnified Party and reimburses the Indemnified Party for the reasonable cost and expenses incurred by the Indemnified Party prior to the assumption by the Indemnifying Party of such defence. The Indemnifying Party shall not be entitled to settle or compromise any claim, demand, action, suit or proceeding without the prior written consent of the Indemnified Party, unless the Indemnifying Party provides such security to the Indemnified Party as shall be reasonably required by the Indemnified Party to secure the loss to be indemnified hereunder to the extent so compromised or settled.

37.4.2 If the Indemnifying Party has exercised its rights under Clause 37.3, the Indemnified Party shall not be entitled to settle or compromise any claim, action, suit or proceeding without the prior written consent of the Indemnifying Party (which consent shall not be unreasonably withheld or delayed).

37.4.3 If the Indemnifying Party exercises its rights under Clause 37.3, the Indemnified Party shall nevertheless have the right to employ its own counsel, and such counsel may participate in such action, but the fees and expenses of such counsel shall be at the expense of the Indemnified Party, when and as incurred, unless:

(a) the employment of counsel by such party has been authorised in writing by the Indemnifying Party;

(b) the Indemnified Party shall have reasonably concluded that there may be a conflict of interest between the Indemnifying Party and the Indemnified Party in the conduct of the defence of such action;

(c) the Indemnifying Party shall not, in fact, have employed independent counsel reasonably satisfactory to the Indemnified Party, to assume the defence of such action and shall have been so notified by the Indemnified Party; or

(d) the Indemnified Party shall have reasonably concluded and specifically notified the Indemnifying Party either:

(i) that there may be specific defences available to it which are different from or additional to those available to the Indemnifying Party; or

(ii) that such claim, action, suit or proceeding involves or could have a material adverse effect upon it beyond the scope of this Agreement:

Provided that if Sub-clauses (b), (c) or (d) of this Clause 37.4.3 shall be applicable, the counsel for the Indemnified Party shall have the right to direct the defence of such claim, demand, action, suit or proceeding on behalf of the Indemnified Party, and the reasonable fees and disbursements of such counsel shall constitute legal or other expenses hereunder.

37.5 No consequential claims

Notwithstanding anything to the contrary contained in this Article 37, the indemnities herein provided shall not include any claim or recovery in respect of any cost, expense, loss or damage of an indirect, incidental or consequential nature, including loss of profit, except as expressly provided in this Agreement.

37.6 Limitation of Liability

37.6.1 Except as otherwise provided in this Agreement, neither Party shall be liable to the other Party for any loss of profit or for any other indirect or consequential damages or losses that may be suffered in connection with this Agreement.

37.7 Survival on Termination

The provisions of this Article 37 shall survive Termination.

Article 38 RIGHTS AND TITLE OVER SITES

38.1 Operator's rights

For the purpose of this Agreement, the Operator shall have rights to the use of the Depot Sites as the sole and exclusive licensee, subject to and in accordance with this Agreement, and to this end, it may regulate the entry and use of the Depot Sites by third parties in accordance with and subject to the provisions of this Agreement.

38.2 Access rights of the Authority and others

38.2.1 The Operator shall allow free access to the Depot Sites at all times for the authorised representatives of the Authority and for the persons duly authorised by any Government Instrumentality to inspect the Maintenance Depot, and to investigate any matter within their authority, and upon reasonable notice, the Operator shall provide to such persons reasonable assistance necessary to carry out their respective duties and functions.

38.2.2 The Operator shall, for the purpose of operation and maintenance of any utility allow free access to the Depot Sites, as the case may be, at all times for the authorised persons and vehicles of the controlling body of such utility.

38.3 Property taxes

38.3.1 All property taxes on the Depot Sites shall be payable by the Authority as owner of the Depot Sites; provided, however, that any such taxes payable by the Operator under Applicable Laws for use of the Depot Sites shall not be reimbursed or payable by the Authority. For the avoidance of doubt, the Parties agree that stamp duties, if any, due and payable on the grant of licence comprising this Agreement shall be paid by the Authority. Provided, however, that the Authority may require the Operator to pay such stamp duties, which shall be reimbursed by the Authority to the Operator within 15 (fifteen) days of receiving the demand therefor.

38.4 Restriction on sub-letting

The Operator shall not sublicense or sublet the whole or any part of Depot Sites, save and except as may be expressly set forth in this Agreement; provided that nothing contained herein shall be construed or interpreted as restricting the right of the Operator to appoint Contractors for the performance of its obligations hereunder including for Operation and Maintenance of all or any part of the Depot Sites.

Article 39 DISPUTE RESOLUTION

39.1 Dispute resolution

39.1.1 Any dispute, difference or controversy of whatever nature howsoever arising under or out of or in relation to this Agreement (including its interpretation) between the Parties, and so notified in writing by either Party to the other Party (the "**Dispute**") shall, in the first instance, be attempted to be resolved amicably in accordance with the procedure set forth in Clause 39.2.

39.1.2 The Parties agree to use their best efforts for resolving all Disputes arising under or in respect of this Agreement promptly, equitably and in good faith, and further agree to provide each other with reasonable access during normal business hours to all non- privileged records, information and data pertaining to any Dispute.

39.2 Amicable Settlement

If any dispute or difference or claims of any kind arises between the Authority and the Operator in connection with construction, interpretation or application of any terms and conditions or any matter or thing in any way connected with or in connection with or arising out of this Agreement, or the rights, duties or liabilities of any Party under this Agreement, whether before or after the termination of this Agreement, then the Parties shall meet together promptly within 7 days of notice of dispute under 39.1.1, at the request of any Party, in an effort to resolve such dispute, difference or claim by discussion between them.

39.3 Assistance of Expert

39.3.1 In the event of failure to amicably settle the disputes within 7 days of the meeting held under Clause 39.2 for amicable settlement, for settlement of any Dispute between the Parties, either Party may call upon a mutually accepted person(the mediator) to mediate and assist the Parties in arriving at an amicable settlement thereof. Failing mediation by such person or without the intervention of such person, either Party may require such Dispute to be referred to the Additional Chief Secretary of the Administrative Department of the Authority and the Chairman of the Board of Directors of the Operator for settlement, and upon such reference, the said persons shall meet no later than 7 (seven) days from the date of such reference to discuss and attempt to resolve the Dispute. If such meeting does not take place within the 7 (seven) day period or the Dispute is not amicably settled within 15 (fifteen) days of the meeting or the Dispute is not resolved as evidenced by the signing of written terms of settlement within 45 (forty five) days of the notice in writing referred to in Clause 39.1.1 or such longer period as may be mutually agreed by the Parties, either Party may refer the Dispute to arbitration in accordance with the provisions of Clause 39.4. The fees payable to the Mediator shall be borne equally by the Parties.

39.4 Arbitration

39.4.1 Any Dispute which is not resolved amicably , as provided in Clause 39.2 and Clause 39.3, shall be finally decided by reference to arbitration by aboard of arbitrators constituted in accordance with Clause 39.4.2. Such

arbitration shall be held in accordance with the Rules of Nani Palkhivala Arbitration Centre, Chennai (the "**Rules**") or such other rules as may be mutually agreed by the Parties and shall be subject to provisions of the Arbitration and Conciliation Act, 1996. The place of such arbitration shall be Chennai, and the language of arbitration proceedings shall be English.

39.4.2 the arbitration for adjudication of Disputes shall be conducted before an a board of 3 (three) arbitrators. Each Party shall be entitled to nominate 1 (one) arbitrator within 30 days of receipt of request by one Party to the other Party to refer the Disputes for adjudication by arbitration and nominate an arbitrator for constituting the Arbitral Tribunal , and the nominated two arbitrators shall mutually appoint a third arbitrator within 30 days from the date of their appointment .In the event of either Party failing to nominate an arbitrator within 30 days from the date of receipt of request to do so or the two nominate arbitrators failing to nominate/appoint the third arbitrator within 30 days of their nomination, the appointment shall be made in accordance with the Arbitration and Conciliation Act, 1996. The parties agree that the presiding arbitrator shall be a retired High Court or retired Supreme Court Judge and the request for same shall be made to the nominated arbitrator by each Party.

39.4.3 The Operator and the Authority agree that an Award may be enforced against the Operator and/or the Authority, as the case may be, and their respective assets wherever situated.

39.4.4 This Agreement and the rights and obligations of the Parties shall remain in full force and effect, pending the Award in any arbitration proceedings hereunder.

39.5 Adjudication by a tribunal

In the event of constitution of a statutory tribunal or other forum as the case may be with powers to adjudicate upon disputes between the Operator and the Authority, all Disputes arising after such constitution shall, instead of reference to arbitration under Clause 39.4, be adjudicated upon by such tribunal or other forum in accordance with Applicable Laws and all references to Dispute Resolution Procedure shall be construed accordingly. For avoidance of doubt, the Parties hereto agree that the adjudication hereunder shall not be final and binding until an appeal against such adjudication has been decided by an appellate tribunal or court of competent jurisdiction, as the case may be, or no such appeal has been preferred within the time specified in the Applicable Law

Article 40 DISCLOSURE

40.1 Disclosure of Specified Documents

The Operator shall make available for inspection by any person, copies of this Agreement, the Maintenance Manual, the Operation Manual, the Safety Requirements and the Specifications and Standards (hereinafter collectively referred to as the "**Specified Documents**"), free of charge, during normal business hours on all working days at the Operator's registered office and office in Chennai. The Operator shall prominently display at the Maintenance Depot, public notices stating the availability of the Specified Documents for such inspection and shall make copies of the same available to any person upon payment of copying charges on a 'no profit no loss' basis.

40.2 Disclosure of Documents relating to safety

The Operator shall make available for inspection by any person copies of all Documents and data relating to Safety of the Buses, free of charge, during normal business hours on all working days, at the Operator's registered office and office in Chennai. The Operator shall make copies of the same available to any person upon payment of copying charges on a 'no profit no loss' basis.

40.3 Withholding disclosure of Protected Documents

Notwithstanding the provisions of Clauses 40.1 and 40.2, the Authority shall be entitled to direct the Operator, from time to time, to withhold the disclosure of Protected Documents (as defined herein below) to any person in pursuance of the aforesaid Clauses.

Explanation:

The expression "**Protected Documents**" shall mean such of the Specified Documents or documents referred to in Clauses 40.1 and 40.2, or portions thereof, the disclosure of which the Authority is entitled to withhold under the provisions of the Right to Information Act, 2005.

Article 41 REDRESSAL OF COMPLAINTS

41.1 Complaint Register

41.1.1 The Operator shall keep one register (the “Complaint Register”) in every Bus for recording of complaints by Users, and another for recording of complaints by drivers and maintenance staff.

41.1.2 The Complaint Register shall be securely bound, and each page thereof shall be duly numbered. It shall have appropriate columns including the complaint number, date, substance of the complaint and the action taken by the Operator.

41.1.3 Without prejudice to the provisions of Clauses 41.1.1 and 41.1.2, the Authority may, in consultation with the Operator, specify the procedure for making complaints in electronic form and for responses thereto.

41.2 Redressal of complaints

41.2.1 The Operator shall inspect the Complaint Register of every Bus including compliants registered electronically before undertaking any Maintenance, as the case may be, and take prompt and reasonable action for redressal of each complaint. The action taken shall be briefly recorded by the Operator in the Complaint Register.

41.2.2 In the event that a complaint shall require an urgent response from the Operator, the driver of a Bus or any maintenance staff of the Authority, as the case may be, shall inform the Maintenance Depot or the Control Centre forthwith.

41.2.3 The Operator shall submit to the Authority, relevant extracts of the Complaint Register no later than [7 (seven)] days from the close of each month. If the Operator fails to address complaints in accordance with this Article 41, the Operator shall pay Damages equal to INR 2,500 per bus for each day of delay to rectify each of the complaints specified in the Complaint Register, to the satisfaction of the Authority.

41.2.4 The operator shall include "display of information pertaining to Internal Complaints Committee, and penal consequences of violation of sexual harassment policy as per the POSH Act in operator's registered office, office in Chennai, maintenance depot and buses"; - Also, include "display of Women Helpline no. or contact details of persons in charge of grievance redressal in each bus".

Article 42 MISCELLANEOUS

42.1 Governing law and jurisdiction

This Agreement shall be construed and interpreted in accordance with and governed by the laws of India, and the courts at [●]6 shall have exclusive jurisdiction over matters arising out of or relating to this Agreement.

42.2 Waiver of immunity

Each Party unconditionally and irrevocably:

(a) agrees that the execution, delivery and performance by it of this Agreement constitute commercial acts done and performed for commercial purpose;

(b) agrees that, should any proceedings be brought against it or its assets, property or revenues in any jurisdiction in relation to this Agreement or any transaction contemplated by this Agreement, no immunity (whether by reason of sovereignty or otherwise) from such proceedings shall be claimed by or on behalf of the Party with respect to its assets;

(c) waives any right of immunity which it or its assets, property or revenues now has, may acquire in the future or which may be attributed to it in any jurisdiction; and

(d) consents generally in respect of the enforcement of any judgement or award against it in any such proceedings to the giving of any relief or the issue of any process in any jurisdiction in connection with such proceedings (including the making, enforcement or execution against it or in respect of any assets, property or revenues whatsoever irrespective of their use or intended use of any order or judgement that may be made or given in connection therewith).

42.3 Depreciation

For the purposes of depreciation under Applicable Laws, the property representing the capital investment made by the Operator in the Maintenance Depot shall be deemed to be acquired and owned by the Operator. For the avoidance of doubt, the Authority shall not in any manner be liable in respect of any claims for depreciation to be made by the Operator under Applicable Laws.

42.4 Delayed payments

42.4.1 The Parties hereto agree that payments due that are not covered under Payment Security Mechanism from one Party to the other Party under the provisions of this Agreement shall be made within the period set forth therein, and if no such period is specified, within 30 (thirty) days of receiving a demand along with the necessary particulars. Unless otherwise specified in this Agreement, in the event of delay beyond such period, the defaulting Party shall pay interest for the period of delay calculated at a rate equal to

3% (three per cent) above the Bank Rate, and recovery thereof shall be without prejudice to the rights of the Parties under this Agreement including Termination thereof.

42.4.2 Unless otherwise specified, any interest payable under this Agreement shall accrue on a daily outstanding basis and shall be compounded on the basis of quarterly rests.

42.5 Waiver

42.5.1 Waiver, including partial or conditional waiver, by either Party of any default by the other Party in the observance and performance of any provision of or obligations under this Agreement:

(a) shall not operate or be construed as a waiver of any other or subsequent default hereof or of other provisions of or obligations under this Agreement;
(b) shall not be effective unless it is explicitly given in in writing and executed by a duly authorised representative of the Party; and
(c) shall not affect the validity or enforceability of this Agreement in any manner.
(d) Shall not operate or be construed by conduct.

42.5.2 Neither the failure by either Party to insist on any occasion upon the performance of the terms, conditions and provisions of this Agreement or any obligation thereunder nor time or other indulgence granted by a Party to the other Party shall be treated or deemed as waiver of such breach or acceptance of any variation or the relinquishment of any such right hereunder.

42.6 Liability for review of Documents and Drawings

Except to the extent expressly provided in this Agreement:

(a) no review, comment or approval by the Authority of any Project Agreement, Document or Drawing submitted by the Operator nor any observation or inspection of the construction, operation or maintenance of the Project and Buses nor the failure to review, approve, comment, observe or inspect hereunder shall relieve or absolve the Operator from its obligations, duties and liabilities under this Agreement, Applicable Laws and Applicable Permits; and
(b) the Authority shall not be liable to the Operator by reason of any review, comment, approval, observation or inspection referred to in Sub-clause (a) above.

42.7 Exclusion of implied warranties etc.

This Agreement expressly excludes any warranty, condition or other undertaking implied at law or by custom or otherwise arising out of any other agreement between the Parties or any representation by either Party not contained in a binding legal agreement executed by both Parties.

42.8 Survival

42.8.1 Termination shall:

(a) not relieve the Operator or the Authority, as the case may be, of any obligations hereunder which expressly or by implication survive Termination hereof; and

(b) except as otherwise provided in any provision of this Agreement expressly limiting the liability of either Party, not relieve either Party of any obligations or liabilities for loss or damage to the other Party arising out of, or caused by, acts or omissions of such Party prior to the effectiveness of such Termination or arising out of such Termination.

42.8.2 All rights and obligations surviving Termination shall only survive for a period of 3 (three) years following the date of such Termination; provided, however, that all obligations of the Operator in relation to licensing, sub-licensing, assignment or transfer of the specified Intellectual Property to the Authority shall survive the Termination in perpetuity.

42.9 Entire Agreement

This Agreement and the Schedules together constitute a complete and exclusive statement of the terms of the agreement between the Parties on the subject hereof, and no amendment or modification hereto shall be valid and effective unless such modification or amendment is agreed to in writing by the Parties and duly executed by persons especially empowered in this behalf by the respective Parties. All prior written or oral understandings offers or other communications of every kind pertaining to this Agreement are abrogated and withdrawn. For the avoidance of doubt, the Parties hereto agree that any obligations of the Operator arising from the Request for Qualification or Request for Proposals, as the case may be, shall be deemed to form part of this Agreement and treated as such, provided however, that if there is a contradiction or conflict between the terms of the Request for Qualification or Request for Proposals and the terms of this Agreement, the terms of this Agreement shall prevail.

42.10 Severability

If for any reason whatsoever, any provision of this Agreement is or becomes invalid, illegal or unenforceable or is declared by any court of competent jurisdiction or any other instrumentality to be invalid, illegal or unenforceable, the validity, legality or enforceability of the remaining provisions shall not be affected in any manner, and the Parties will negotiate in good faith witha view to agreeing to one or more provisions which may be substituted for such invalid, unenforceable or illegal provisions, as nearly as is practicable to such invalid, illegal or unenforceable provision. Failure to agree upon any such provisions shall not be subject to the Dispute Resolution Procedure set forth under this Agreement or otherwise.

42.11 No partnership

This Agreement shall not be interpreted or construed to create an association or partnership between the Parties, or to impose any partnership obligation or liability upon either Party, and neither Party shall have any right, power or Authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

42.12 Third parties

This Agreement is intended solely for the benefit of the Parties, and their respective successors and permitted assigns, and nothing in this Agreement shall be construed to create any duty to, standard of care with reference to, or any liability to, any person not a Party to this Agreement.

42.13 Successors and assigns

This Agreement shall be binding upon and inure to the benefit of the Parties and their respective successors and permitted assigns.

42.14 Notices

Any notice or other communication to be given by any Party to the other Party under or in connection with the matters contemplated by this Agreement shall be in writing and shall:

(a) in the case of the Operator, be given by facsimile or e-mail and by letter delivered by hand to the address given and marked for attention of the person set out below or to such other person as the Operator may from time to time designate by notice to the Authority; provided that notices or other communications to be given to an address outside [●] may, if they are subsequently confirmed by sending a copy thereof by registered acknowledgement due, air mail or by courier, be sent by facsimile or email as the Operator may from time to time designate by notice to the Authority;

{Attention:
Designation:
Address:
Email:}

(b) in the case of the Authority, be given by facsimile or e-mail and by letter delivered by hand at the address given below and addressed to the person named below with a copy delivered to the Authority Representative or such other person as the Authority may from time to time designate by notice to the Operator; provided that if the Operator does not have an office in [●]8 it may send such notice by facsimile or email and by registered acknowledgement due, air mail or by courier;

{Name:
Designation:

Address:
Email:}; and

(c) any notice or communication by a Party to the other Party, given in accordance herewith, shall be deemed to have been delivered when in the normal course of post it ought to have been delivered and in all other cases, it shall be deemed to have been delivered on the actual date and time of delivery; provided that in the case of facsimile or e-mail, it shall be deemed to have been delivered on the working day following the date of its delivery.

42.15 Language

All notices required to be given by one Party to the other Party and all other communications, Documentation and proceedings which are in any way relevant to this Agreement shall be in writing and in English language.

42.16 Counterparts

This Agreement may be executed in two counterparts, each of which, when executed and delivered, shall constitute an original of this Agreement.

Article 43 DEFINITIONS

In this Agreement, the following words and expressions shall, unless repugnant to the context or meaning thereof, have the meaning hereinafter respectively assigned to them:

"**Accounting Year**" means the financial year commencing from the first day of April of any calendar year and ending on the thirty-first day of March of the next calendar year;

"**Additional Auditors**" shall have the meaning ascribed to it in Clause 26.2.3;

"**Additional Termination Payment**" means the amount payable upon Termination in respect of Specified Assets, if any, as further limited by the provisions of Clause 32.4.2;

"**Adjusted Depreciated Value**" means the amount arrived at after adjusting the depreciated book value of an asset (as stated in the books of account of the Operator) to reflect the variation occurring in WPI between the date of procurement thereof and the Transfer Date;

"**Adjusted Equity**" means the Equity funded in Indian Rupees and adjusted on the first day of the current month (the "**Reference Date**"), in the manner set forth below, to reflect the change in its value on account of depreciation and variations in WPI, and for any Reference Date occurring:

(a) on or before COD, the Adjusted Equity shall be a sum equal to the Equity funded in Indian Rupees and expended on the Project, revised to the extent of one half of the variation in WPI occurring between the first day of the month of Appointed Date and the Reference Date;

(b) from COD and until the 4th (fourth) anniversary thereof, an amount equal to the Adjusted Equity as on COD shall be deemed to be the base (the "**Base Adjusted Equity**") and the Adjusted Equity hereunder shall be a sum equal to the Base Adjusted Equity, revised at the commencement of each month following COD to the extent of variation in WPI occurring between COD and the Reference Date; and

(c) after the 4th (fourth) anniversary of COD, the Adjusted Equity hereunder shall be a sum equal to the Base Adjusted Equity, reduced by 0.56% (zero point five six per cent)[9] thereof at the commencement of each month following the 4th (fourth) anniversary of COD and the amount so arrived at shall be revised to the extent of variation in WPI occurring between COD and the Reference Date;

For the avoidance of doubt, the Adjusted Equity shall, in the event of Termination, be computed as on the Reference Date immediately preceding the Transfer Date; provided that no reduction in the Adjusted Equity shall be made for a period equal to the duration, if any, for which the Concession Period is extended, but the revision on account of WPI shall continue to be made;

"**Affected Party**" shall have the meaning as set forth in Clause 29.1;

"**Agreement**" or "means this Agreement, its Recitals, the Schedules hereto and any amendments thereto made in accordance with the provisions contained in this

Agreement;

"**Allowed Energy Consumption**" shall have the meaning as set forth in

Clause 22.5.3; "**Annual Safety Report**" shall have the meaning ascribed

to it in Clause 18.5.1; "**Appendix**" shall have the meaning as set forth in

Clause 10.3.1;

"**Applicable Laws**" means the Constitution of India and all and any laws, enacted or brought into force and effect by the GoI, the State Government or any Government Instrumentality having jurisdiction over the Parties, the Depot Sites or the Project, including rules, regulations and notifications made thereunder, and judgements, decrees, injunctions, writs and orders of any court of record, applicable to this Agreement and the exercise, performance and discharge of the respective rights and obligations of the Parties hereunder, as may be in force and effect during the subsistence of this Agreement;

"**Applicable Permits**" means all clearances, licences, permits, authorisations, no objection certificates, consents, approvals and exemptions required to be obtained or maintained under Applicable Laws in connection with the construction, Operation and Maintenance of the Buses and Maintenance Depots, as the case may be, during the subsistence of this Agreement and shall include those as set out in Schedule-C;

"**Appointed Date**" means the date on which Financial Close is achieved and all the Condition Precedents are satisfied or waived, as the case may be, in accordance with the provisions of this Agreement, and such date shall be the date of commencement of the Concession Period;

"**Approved Valuer**" means a firm of valuers recognized as such by the Inform Tax Department and having experience of valuing at least 5 (five) properties exceeding Rs. 100 cr. (Rs. One hundred crore) each in value.

"**Arbitration Act**" means the Arbitration and Conciliation Act, 1996 and shall include modifications to or any re-enactment thereof, as in force from time to time;

"**Associate**" or "**Affiliate**" means, in relation to either Party {and/or Consortium Members}, a person who controls, is controlled by, or is under the common control with such Party {or Consortium Member} (as used in this definition, the expression "control" means, with respect to a person which is a company or corporation, the ownership, directly or indirectly, of more than 50% (fifty per cent) of the voting shares of such person, and with respect to a person which is not a company or corporation, the power to direct the management and policies of such person, whether by operation of law or by contract or otherwise);

"**Authority Applicable Permits**" shall mean those Applicable Permits that are required to be obtained by the Authority as set out in Schedule-C;

"**Authority Default**" shall have the meaning set forth in Clause 32.2.1;

"**Authority Indemnified Persons**" shall have the meaning set forth in Clause 37.1.1;

"**Authority Nominated Personnel**" means any person authorized by the Authority to collect User Fare from passengers for using the Bus Service;

"**Authority Representative**" means such person or persons as may be authorised in writing by the Authority to act on its behalf under this Agreement and shall include any person or persons having Authority to exercise any rights or perform and fulfil any obligations of the Authority under this Agreement;

"**Availability**" shall have the meaning set forth in

Clause 20.3.2; "**Award**" shall have the meaning

set forth in Clause 39.3.4;

"**Bank**" means a nationalised bank or a scheduled bank incorporated in India and having a minimum net worth of Rs. 1,000 crore (Rupees one thousand crore). For the avoidance of doubt, scheduled bank shall mean a bank as defined under section 2(e) of the Reserve Bank of India Act, 1934;

"**Bank Rate**" means the rate of interest specified by the Reserve Bank of India from time to time in pursuance of section 49 of the Reserve Bank of India Act, 1934 or any replacement of such Bank Rate for the time being in effect;
"**Base Index Date**" means the last date of the month which shall have closed no later than 30 (thirty) days prior to the Bid Date;

"**Bid**" means the documents in their entirety comprised in the bid submitted by the {selected bidder/Consortium} in response to the Request for Proposals in accordance with the provisions thereof and "**Bids**" shall mean the bids submitted by any and all pre-qualified bidders;

"**Bid Date**" means the last date on which the Bid may have been submitted in accordance with the provisions of the Request for Proposals;

"Bid Documents" mean the Request for Proposal dated _____ issued by the Authority on behalf of participating entities comprising of 2 (two) volumes including Request for Proposal (Volume I), Draft Concession Agreement (Volume II).

"**Bid Security**" means the security provided by the Operator to the Authority along with the Bid in accordance with the Request for Selection, and which is to remain in force until substituted by the Performance Security;

"**Breakdown**" means the mechanical failure of a bus that prevents the bus from being in operation or impedes the operation so much that it is impossible or dangerous to operate, provided that such mechanical failure has not arisen on account of any accidents, vandalism, arson, riots or natural calamities;

"**Breakdown Factor**" shall have the meaning as set forth in Clause 20.2.1;

"**Bus**" means a bus complying with Standards and Specifications as detailed in Schedule-B, procured by the Operator as per the Delivery Schedule, for the purposes of Project;

"**Bus Lease Agreement**" means the agreement entered into between the Operator and a Lessor for leasing of the Buses to be supplied to the Authority in accordance with this Agreement.

"**Bus Kilometer**" means kilometers travelled by each Bus, as per

Clause 22.1.3; "**Bus Kms Frequency**" shall have the meaning as

set forth in Clause 20.5.1(b); "**Bus Service**" means the service

provided to Users in terms of this Agreement;

"**Bus Stop**" means designated stops, along the routes from where passengers board and alight the Bus, as per the Deployment Plan at Schedule-J;

"**Change in Law**" means the occurrence of any of the following after the Bid Date:

(a) the enactment of any new Applicable Law or the imposition, adoption or issuance of any new Applicable Law by any Government Instrumentality;

(b) the repeal, modification or re-enactment of any existing Applicable Law;

(c) the commencement of any Applicable Law, which has not entered into effect until the Bid Date;

(d) the introduction of a requirement for the Operator to obtain any new Applicable Permit or the unlawful revocation of an Applicable Permit;

(e) a change in the interpretation or application of any Applicable Law, by a judgement of a court of record which has become final, conclusive and binding, as compared to such interpretation or application by a court of record prior to the Bid Date; or

(f) any change in the rates of any of the Taxes that have a direct effect on the Agreement;

"**Change in Ownership**" means a transfer of the direct and/or indirect legal or beneficial ownership of any shares, or securities convertible into shares or a fresh issue of any of the foregoing, that causes the aggregate holding of the {Selected Bidder/Consortium Members}, together with {its/their} Associates in the total Equity to decline below (i) 51% (fifty one per cent) thereof till the completion of 3 (three) years from the COD and (ii) 26% (twenty six per cent) thereof of the OEM or its Affiliates, or such lower proportion as may be permitted by the Authority during the remaining Concession Period. Any direct and/or indirect transfer of legal or beneficial ownership of any shares, or securities convertible into shares, (i) such that the Consortium Members cease to collectively hold a minimum of 51% (fifty one per cent) of the subscribed and paid-up Equity of the Operator, (ii) by any Consortium Member (i) who is either an original equipment manufacturer (including its Affiliates); or (ii) whose technical and/or financial capacity was evaluated for the purposes of selection in response to the Request for Proposal, that results, or may result, in such member ceasing to hold Equity less than 26% (twenty six per cent) of the Equity, till the expiry of the Concession Period, shall constitute a Change in Ownership;

"**Change of Scope**" shall have the meaning as set forth in

Clause 15.1; "**Change of Scope Notice**" shall have the

meaning set forth in Clause 15.2.1; "**Change of Scope Order**"

shall have the meaning set forth in Clause 15.2.3;

"**Charging Infrastructure**" means the charging infrastructure and equipment required to be installed by the Operator at the Maintenance Depots for the sole purpose of charging Buses which shall include the required electric and allied civil infrastructure for Charging the buses, in accordance with the Specifications and Standards;

"**Commencement of Service**" means, with respect to any Bus, the date such Bus is commissioned and put in commercial operations, in each case, in accordance with the provisions of this Agreement;

"**Commercial Operation Date**" or "**COD**" shall have the meaning set forth in

Clause 14.2.3; "**Completion Certificate**" shall have the meaning as set

forth in Clause 14.2.2; "**Complaint Register**" shall have the meaning as set

forth in Clause 41.1.1;

"**Concession**" shall have the meaning set forth in

Clause 3.1.1; "**Control Centre**" shall have the meaning

as set forth in Clause 16.4.7;

"**Conditions Precedent**" shall have the meaning as set forth in

Clause 4.1.1; "**Consumables**" shall have the meaning as set

forth in Clause 17.3.1; "**Concession Period**" shall have the

meaning as set forth in Clause 3.1.1;

"**Contract Year**" means the First Contract Year and thereafter each period of 12 (twelve) Months, provided that the last Contract Year shall end on the last day of the Concession Period.

"**Contractor**" means the person or persons, as the case may be, with whom the Operator has entered into any of the construction contracts, the O&M Contract any other material contract for the Fit Out Works, operation and/or maintenance of the Maintenance Depots, the Charging Infrastructure or the Buses, as the case may be, or matters incidental thereto, but does not include a person who has entered into an agreement for providing financial assistance to the Operator;

"**Covenant**" shall have the meaning as set forth in Clause 5.2.5;

"**Cure Period**" means the period specified in this Agreement for curing any breach or default of any provision of this Agreement by the Party responsible for such breach or default and shall:

(a) commence from the date on which a notice is delivered by one Party to the other Party asking the latter to cure the breach or default specified in such notice;

(b) not relieve any Party from liability to pay Damages or compensation under the provisions of this Agreement; and

(c) not in any way be extended by any period of Suspension under this Agreement; provided that if the cure of any breach by the Operator requires any reasonable action by the Operator that must be approved by the Authority hereunder, the applicable Cure Period shall be extended by the period taken by the Authority to accord its approval;

"**Damages**" shall have the meaning as set forth in Sub-clause (y) of Clause 1.2.1;

"**Debt Due**" means the aggregate of the following sums expressed in Indian Rupees

outstanding on the Transfer Date:

(a) the principal amount of the debt provided by the lenders under the financing agreements for financing the Total Project Cost (the "principal") but excluding any part of the principal that had fallen due for repayment 2 (two) years prior to the Transfer Date;

(b) all accrued interest, financing fees and charges payable under the financing agreements on, or in respect of, the debt referred to in Sub-clause (a) above until the Transfer Date but excluding

(i) any interest, fees or charges that had fallen due one year prior to the Transfer Date, (ii) any penal interest or charges payable under the financing agreements to any lender, and
(iii) any pre-payment charges in relation to accelerated repayment of debt except where such charges have arisen due to Authority Default, provided that any accrued interest payable under the financing agreements on, or in respect of, the debt referred to in Sub- clause (a) in the event of Termination due to an Operator Default shall be capped at the lesser of (i) the interest rate specified in the financing agreements; or (ii) 5% (five percent) above the Bank Rate;

(c) any debt provided by the lenders in connection with any bank guarantees submitted by the Operator to the Authority pursuant to any Subsidy or Government Fiscal Assistance received by the Operator, to the extent that such bank guarantees have been called and become funded; and

(d) if the Buses are leased by the Operator, then the lease rentals for the shorter of: (i) the remaining term of the Bus Lease Agreement(s); and (ii) the balance Concession Period.

provided that if all or any part of the Debt Due is convertible into Equity at the option of lenders and/or the Operator, it shall for the purposes of this Agreement be deemed to be Debt Due even after such conversion and the principal thereof shall be dealt with as if such conversion had not been undertaken; provided further that the Debt Due, on or after COD, shall in no case exceed 70% (seventy per cent) of the Total Project Cost.

"**Debt Service**" means the sum of all payments on account of principal, interest, financing fees and charges, Bus Lease rentals due and payable in an Accounting Year to the Senior Lenders or the Lessor(s), as the case may be, for and in respect of Debt Due under the Financing Agreements or under the Bus Lease Agreement(s), as the case may be;

"**Defects Performance Security**" shall have the meaning as set forth in Clause 34.2.3;

"**Delay Event**" shall mean:

(i) occurrence of a Force Majeure event, provided that the requirements of Clause 29.5 have been complied with;

(ii) a Change in Law;

(iii) undue delay by the relevant Government Instrumentality in granting or renewing any Applicable Permit, despite the Operator having applied for

such grant or renewal expeditiously and having complied with the requirements of Applicable Laws in making such application;

(iv) undue delay by the relevant Government Instrumentality in providing any utility connection, despite the Authority or the Operator, as the case may be, having applied for such utility connection expeditiously and having complied with the requirements of Applicable Laws in making such application;

(v) failure by the Authority to handover possession of Maintenance Depots meeting the Minimum Maintenance Depot Specifications in accordance with the requirements of this Agreement;

(vi) any delay directly attributable to unforeseen site conditions in accordance with Clause 10.9; and

(vii) delay caused in complying with any instructions of the Authority, which instructions are not directly attributable to any default of the Operator.

"**Delivery Schedule**" shall mean the schedule according to which the Operator shall procure and deliver the Buses in accordance with the terms of this Agreement and as set out in Schedule-J;

"**Depot Sites**" shall have the meaning as set forth in Article

10; "**Deployment Plan**" shall have the meaning as set forth in

Clause 16.5.1;

"**Designs**" or "**Drawings**" means all of the drawings, designs, calculations and documents pertaining to the Buses as set forth in Schedule-F;

"**Design Report**" shall have the meaning as set forth in Clause

13.4.2; "**Dispute**" shall have the meaning as set forth in Clause

39.1.1;

"**Dispute Resolution Procedure**" means the procedure for resolution of Disputes as set forth in Article 39;

"**Divestment Requirements**" means the obligations of the Operator for and in respect of Termination as set forth in Clause 33.1.1;

"**Document**" or "**Documentation**" means documentation in printed or written form, or in tapes, discs, drawings, computer programmes, writings, reports, photographs, films, cassettes, or expressed in any other written, electronic, audio or visual form;

"**Emergency**" means a condition or situation that is likely to endanger the environment or lives or security of the individuals on or about the Maintenance Depots or Buses, as the case may be, or which poses an immediate threat of material damage to any of the Project Assets;

"**Encumbrances**" means, in relation to the Licensed Premises, Maintenance Depots or Buses and, as the case may be, any encumbrances such as mortgage, charge, pledge, lien, hypothecation, security interest, assignment, privilege or priority of any kind having the effect of security or other such obligations, and shall include any

designation of loss payees or beneficiaries or any similar arrangement under any insurance policy pertaining to the Maintenance Depots or Buses, as the case may be, where applicable herein;

"Equal opportunity" means that the Operator cannot use the following characteristics as reasons to hire or reject candidates or make other employment decisions including wages: Race / color, origin / ethnicity, religion, age, sex / gender / sexual orientation, physical or mental disability except to the extent it such characteristic makes the candidate unsuitable for the position in question e.g., a candidate with poor eyes-sight for driving duty.

"**Equity**" means the sum expressed in Indian Rupees representing the paid up equity share capital of the Operator for meeting the equity component of the Total Project Cost, and for the purposes of this Agreement shall include convertible instruments or other similar forms of capital, which shall compulsorily convert into equity share capital of the Operator, and any interest-free funds advanced by any shareholder of the Operator for meeting such equity component.

"**Escrow Accounts**" shall mean and include Project Receivable Escrow Account and Project Operating Escrow Account being the accounts which the Authority shall open and maintain with the Escrow Bank in which all inflows and outflows of cash on account of capital and revenue receipts and expenditures shall be credited and debited, as the case may be, in accordance with the provisions of this Agreement, ;

"**Escrow Agreement**" shall have the meaning set forth in

Clause 27.1.2; "**Escrow Bank**" shall have the meaning

set forth in Clause 27.1.1; "**Escrow Default**" shall have

the meaning set forth in Schedule-M; "**Fee**" shall have

the meaning set forth in Clause 22.1;

"**Fee Revision Date**" means the date of Fee Revision in accordance with Clause 22.4.1;

"**Financial Aggregator**" means any entity including its associates with the intent and capability of providing capital/funds for the e-bus business eligible as per eligibility and qualifications criteria set forth in Request for Proposals under the project;

"**Financial Close**" means the fulfilment of all Conditions Precedent to the initial availability of funds under the Financing Agreements or the Bus Lease Agreement(s);

"**Financial Model**" means the financial model adopted by lenders, setting forth the capital and operating costs of the Project and revenues therefrom on the basis of which financial viability of the Project has been determined by the lenders or the Lessor under the Bus Lease Agreement(s), and includes a description of the assumptions and parameters used for making calculations and projections therein;

"**Financial Package**" means the financing package indicating the total capital cost of the Project and the means of financing thereof, as set forth in the Financial Model and approved by the lenders, and includes Equity, all financial assistance specified in the financing agreements, subordinated debt, lease rentals and other financial terms of lease under the Bus Lease Agreement(s) if any;

"**Financing Agreements**" means the agreements executed by the Operator in respect

of financial assistance to be provided by the Senior Lenders by way of loans, guarantees, subscription to nonconvertible debentures and other debt instruments including loan agreements, guarantees, notes, debentures, bonds and other debt instruments, security agreements, and other documents relating to the financing (including refinancing) of the Total Project Cost, and includes amendments or modifications made in accordance with Clause 5.2.3;

"**First Contract Year**" means the period of 12 (twelve) calendar months commencing from the date on which the Lot COD for the first Lot of Buses procured by the Operator is achieved.

"**Fit Out Works**" means all works and things required to be undertaken by the Operator to completely fit out, equip and otherwise complete the Maintenance Depots in accordance with this Agreement, including the provision of all service equipment, tools, tackles, facilities, civil and electrical works and any other allied infrastructure (including the Charging Infrastructure) as may be required to Operate and Maintain the Buses, the Maintenance Depot and the Charging Infrastructure;

"**Force Majeure**" or "**Force Majeure Event**" shall have the meaning ascribed to it in Clause 29.1; "**Force Majeure Costs**" shall have the meaning as set forth in Clause 29.7.2;

"General Safety" means an event of a minor accident in which a person is injured or no injury but damage to vehicle and/or property sustains. In case of injury, the nature of injury shall be of minor nature such as a cut, sprain or bruise, where only first aid is required and does not require hospitalisation.

"**GoI**" means the Government of India;

"**Good Industry Practice**" means the practices, methods, techniques, designs, standards, skills, diligence, efficiency, reliability and prudence which are generally and reasonably expected from a reasonably skilled and experienced operator engaged in the same type of undertaking as envisaged under this Agreement and which would be expected to result in the performance of its obligations by the Operator in accordance with this Agreement, Applicable Laws and Applicable Permits in reliable, safe, economical and efficient manner;

"**Government Fiscal Assistance**" means, any financial assistance provided to the Operator by any Government Instrumentality, under any Applicable Laws or any scheme, policy or guidelines, as may be applicable;

"**Government Instrumentality**" means any department, division or sub-division of the Government of India or the State Government and includes any commission, board, Authority, agency or municipal and other local authority or statutory body, including Panchayat, under the control of the Government of India or the State Government, as the case may be, and having jurisdiction over all or any part of the Buses or Maintenance Depots as the case may be, or the performance of all or any of the services or obligations of the Operator under or pursuant to this Agreement;

"**Guaranteed Availability**" shall have the meaning set forth in Clause 20.3.3; "**Guaranteed Arrival Punctuality**" shall have the meaning set

forth in Clause 20.4.4; "**Guaranteed Bus Kms Frequency**" shall have the meaning set forth in Clause 20.5.2; "**Guaranteed Start Punctuality**" shall have the meaning set forth in Clause 20.4.4; "**Guaranteed Trip Frequency**" shall have the meaning set forth in Clause 20.5.2;

"**Indemnified Party**" means the Party entitled to the benefit of an indemnity pursuant to Article 37; "**Indemnifying Party**" means the Party obligated to indemnify the other Party pursuant to Article 37; "**Indirect Political Event**" shall have the meaning as set forth in Clause 29.3;

"**Insolvency Event**" in respect of a Party means:

(a) such Party has (A) applied for or consented to the appointment of, or the taking of possession by, a receiver, custodian, trustee, administrator, liquidator or the like of itself or of all or a substantial part of its assets or business; (B) been unable to pay its debts as such debts become due; (C) enters into a compromise arrangement with its creditors; (D) an attachment or restraint has been levied on the assets of such entity Party which materially affects such Party's ability to perform its obligations under this Agreement; (E) commenced proceedings under the (Indian) Insolvency and Bankruptcy Code, 2016 ("**Code**"); (F) filed a petition seeking to take advantage of any other law relating to bankruptcy, insolvency, reorganization, winding up, or composition or readjustment of debts; or (G) taken any corporate or other action for the purpose of effecting any of the foregoing; or

(b) a proceeding or case has been commenced without the application or consent of such Party in any court of competent jurisdiction seeking (A) its liquidation, reorganization, dissolution or winding-up or the composition or readjustment of debts or, (B) the appointment of an insolvency resolution professional, a trustee, receiver, custodian, administrator, liquidator or the like of such Party under the Code and an order admitting the insolvency petition has been passed in such proceeding and such order has not been stayed or dismissed within a period of [90 (ninety)] days or (C) directions with the same or similar effect happen under the provisions of the Companies Act, 1965 or the Companies Act, 2013 or the Code in relation to the winding up of the company;

"**Insurance Cover**" means the aggregate of the maximum sums insured under the insurances taken out by the Operator pursuant to Article 25, and includes all insurances required to be taken out by the Operator under Clause 25.2 but not actually taken, and when used in the context of any act or event,it shall mean the aggregate of the maximum sums insured and payable or deemed to be insured and payable in relation to such act or event;

"**Intellectual Property**" means all patents, trademarks, service marks, logos, get-up, trade names, internet domain names, rights in designs, blue prints, programmes and

manuals, drawings, copyright (including rights in computer software), database rights, semi-conductor, topography rights, geographical indicators, utility models, rights in know-how and other intellectual property rights, in each case whether registered or unregistered and including applications for registration, and all rights or forms of protection having equivalent or similar effect anywhere in the world;

"**Intelligent Transit Management Systems**" or "**ITMS**" shall have the meaning as set forth in Clause 16.4.7;

"**Invoice**" shall have the meaning as set forth in Clause 22.2.1;

"**Invoice Amount**" shall have the meaning as set forth in Clause 22.2.2;

"**Key Performance Indicators**" shall have the meaning as set forth in Clause 20.1;

"**LOA**" or "**Letter of Award**" means the letter of award referred to in Recital (D);

"**Lead Member**" shall mean the lead member of the Consortium, and in the event there is no Consortium, the Selected Bidder;

"**Lenders' Representative**" means the person duly authorised by the Senior Lenders to act for and on behalf of the Senior Lenders with regard to matters arising out of or in relation to this Agreement, and includes his successors, assigns and substitutes;

"**Lessor"** means the manufacturer or owner of the Buses or any other Person who provides the Buses on lease to the Operator for supply to the Authority in accordance with this Agreement.

"**Licensed Premises**" shall have the meaning set forth in Clause 10.2.2;
"**Lot(s)**" means the Buses procured, by the Operator, in lots as per the Delivery Schedule;

"**Lot Commercial Operation Date**" or "**Lot COD**" shall have the meaning set forth in Clause 14.2.3;

"**Maintenance Depots**" shall mean the bus depots and/or terminals to be handed over by the Authority to the Operator for the Buses at the Depot Sites specified in Schedule-A, in accordance with the Minimum Maintenance Depot Specifications, Applicable Laws and Good Industry Practices;

"**Maintenance Depot Completion Certificate**" shall have the meaning as set forth in Clause 12.5.4;

"**Maintenance Depot Completion Date**" means the date on which the Completion Certificate is issued under the provisions of Article 14;

"**Maintenance Inspection Report**" shall have the meaning as set forth in

Clause 19.3; "**Maintenance Manual**" shall have the meaning ascribed to

it in Clause 17.2.1; "**Maintenance Obligations**" shall have the meaning

as set forth in Clause 17.1.1; "**Maintenance Requirements**" shall have

the meaning as set forth in Clause 17.4;

"**Material Adverse Effect**" means a material adverse effect of any act or event on the ability of either Party to perform any of its obligations under and in accordance with the provisions of this Agreement and which act or event causes a material financial burden or loss to either Party;

"**Minimum Escrow Balance**" shall have the meaning as set forth in Clause 27.1.3;

"**Minimum Maintenance Depot Specifications**" means the minimum specifications and standards according to which the Maintenance Depots are required to be designed, constructed and completed prior to its handover by the Authority to the Operator in accordance with the requirements of this Agreement

"**Monthly Fees**" shall mean the Fees payable to the Operator for each month after commencement of the Bus Services and which shall be calculated in accordance with Article 22;

"**Monthly Assured Bus Kilometres/ Monthly Assured Kilometers**" shall have the meaning ascribed to it in Clause 22.3.1;

"**Monthly Assured Payment Amount**" shall have the meaning ascribed to it in

Clause 22.3.2; "**Monthly Assured Payment Invoice**" shall have the meaning

ascribed to it in Clause 22.3.3;

"**MW**" means minimum wages (skilled category) as notified by the relevant Government Instrumentality in accordance with Applicable Laws.

"**Non-Political Event**" shall have the meaning as set forth in Clause 29.2;

"**Nominated Company**" means a company, incorporated under the provisions of the Companies Act, 1956, or the Companies Act, 2013, as the case may be, selected by the Operator, and proposed to the Authority for assignment/transfer of the Agreement;

"**NPV**" shall have the meaning as set forth in Clause 36.3;

"**Operation and Maintenance**" or "**O&M**" means operation and maintenance of the Buses, the Maintenance Depot and the Charging Infrastructure, as the case may be, and includes all matters connected with or incidental to such maintenance, and provision of services and facilities in accordance with the provisions of this Agreement;

"**O&M Contract**" means the maintenance contract that may be entered into between the Operator and the O&M Contractor for performance of all or any of the O&M obligations;

"**O&M Contractor**" means the person, if any, with whom the Operator has entered into an O&M Contract for discharging O&M obligations for and on behalf of the Operator;

"**O&M Expenses**" means expenses incurred by or on behalf of the Operator or by the Authority, as the case may be, for all O&M including (a) cost of salaries and other compensation to employees, (b) cost of materials, supplies, utilities and other services, (c) premia for insurance, (d) all taxes, duties,cess and fees due and payable for O&M, (e) all repair, replacement, reconstruction, reinstatement, improvement and maintenance costs, (f) payments required to be made under any other contract in connection with or incidental to O&M, and (g) all other expenditure required to be incurred under Applicable Laws, Applicable Permits or this Agreement;

"**Operation Manual**" shall have the meaning as set forth in Clause 16.3.1;

"**Operational Infractions**" shall mean those events, incidents or circumstances of sub-optimal performance and/or non-compliance with the Operations and

Maintenance requirements in this Agreement which are as set out in Schedule-T.

"**Operational Route**" shall have the meaning as set forth in Clause 16.4.1;

"**Operator Applicable Permits**" shall mean those Applicable Permits that are required to be obtained by the Operator as set out in Schedule-C;

"**Operator Default**" shall have the meaning as set forth in Clause 32.1.1;

"**Operator Indemnified Parties**" shall have the meaning as set forth in

Clause 37.1.2; "**Opportunity Charging Stations**" shall have the meaning

as set forth in Clause 16.4.8;

"**Original Electric Bus Manufacturer or OEM**" shall mean a manufacturer of electric buses who has completed testing and certification requirement under Central Motor Vehicle Rules 1989 (CMVR) of at least one (1) electric bus (100% battery operated) from the notified testing agencies under rule 126 of CMVR. i.e., CMVR type- approval of at least one model of Electric Bus.

"**Overnight Charge**" or "**Overnight Charging**" means, with respect to each Bus, the ability to fully charge the battery of such Bus from full discharge, between the time such Bus is scheduled to arrive at the Maintenance Depot after completing its operations on any day and the time such Bus is next scheduled to commence operations (which may be on the immediately next day), in each case in accordance with the Deployment Plan.

"**Panel of Chartered Accountants**" shall have the meaning set forth in Clause 26.2.1;

"**Parties**" means the parties to this Agreement collectively and "**Party**" shall mean any of the parties to this Agreement individually;

"**Passenger Charter**" shall have the meaning as set forth in Clause 20.10;

"**Performance Security**" shall have the meaning as set forth in Clause 9.1.1;

"**PK Fee**" shall be and shall mean the amount in INR payable by the Authority to the Operator for each kilometer of bus operation under this Agreement and at which the LOA has been awarded to the Operator.

"**PKM**" or "**Passenger Kilometres**" means the cumulative distance travelled by Users on the Buses in a day;

"POSH Act, 2013" means Prevention of Sexual Harassment Act 2013 "**Political Event**" shall have the meaning as set forth in Clause 29.4;

"**Project**" means the supply, operation and maintenance of Buses and the Fit Out Works, operation and maintenance of the Maintenance Depots in accordance with the provisions of this Agreement, and includes all works, services and equipment relating to or in respect of the Scope of the Agreement;

"**Project Agreements**" means this Agreement, construction contracts, supply contracts, O&M Contract, the Bus Lease Agreement and any other material agreements or contracts that may be entered into by the Operator with any person in connection with matters relating to, arising out of or incidental to this Agreement, but does not include any agreement for goods and services for the Maintenance Depots;

"**Project Assets**" means all physical and other assets relating to and forming part of the Depot Sites and Maintenance Depots, including:

(a) rights over the Licensed Premises in the form of licence, Right of Way or otherwise;

(b) tangible assets such as civil works and equipment including foundations, embankments, electrical systems, communication systems and administrative offices;

(c) all rights of the Operator under the Project Agreements;

(d) financial assets, such as receivables, security deposits etc.;

(e) insurance proceeds; and

(f) Applicable Permits and authorisations relating to or in respect of the Project; "**Project Milestones**" means the project milestones set forth in Schedule-E; "**Protected Documents**" shall have the meaning as set forth in Clause 40.3; "**Prototype**" shall have the meaning as set forth in Clause 13.4.1;

"**Provisional Maintenance Manual**" shall have the meaning as set forth in Clause 17.2.1; "**Provisional Operation Manual**" shall have the meaning as set forth in Clause 16.3.1; "**Punch List**" shall have the meaning set forth in Clause 14.1.5;

"**Re**.", "**Rs**." or "**Rupees**" or "**Indian Rupees**" means the lawful currency of the Republic of India;

"**Reference Exchange Rate**" means, in respect of any one currency that is to be converted into another currency in accordance with the provisions of this Agreement, the exchange rate as of 12.00 (twelve) noon on the relevant date quoted in Delhi by the State Bank of India, and in the absence of such rate, the average of similar rates quoted in Delhi by the Bank of India and the Bank of Baroda;

"**Reference Index Date**" for and in respect of a Year, means the last date of the month which shall have closed no later than 30 (thirty) days prior to commencement of that Year;

"**Request for Proposal**" or "**RFP**" shall have the meaning as set forth in Recital (E); "**Revision of Fee**" shall have the meaning set forth in Clause 22.4.1;

"Right of Way" means the constructive possession of the Depot Sites, together with all way leaves, easements, unrestricted access and other rights of way, howsoever described, necessary for construction, operation and maintenance of the Maintenance Depots, in accordance with this Agreement;

"**Safety**" means general safety and severe safety;

"**Safety Requirements**" shall have the meaning as set forth in Clause 18.1; "**Scheduled COD**" shall have the meaning set

forth in Clause 14.3;

"**Scheduled CP Satisfaction Date**" shall have the meaning set forth in

Clause 4.2(a); "**Scheduled Maintenance**" shall have the meaning as set

forth in Clause 17.2.2;

"**Scheduled Maintenance Depot Completion Date**" shall have the meaning set forth in Clause 12.5.1;

"**Scope of the Agreement**" shall have the meaning as set forth

in Clause 2.1; "**Selected Bidder**" shall have the meaning as set

forth in Recital (C);

"**Senior Lenders**" means the financial institutions, banks, multilateral lending agencies, trusts, funds and agents or trustees of debenture holders, including their successors and assignees or lessors in case of leasing of assets, who have agreed to guarantee or provide finance to the Operator under any of the Financing Agreements for meeting all or any part of the Total Project Cost and who hold *pari passu* charge on the assets, rights, title and interests of the Operator;

"Severe Safety" means an event of a major accident causing a loss of life or a grievous injury due to which a person is detained in hospital as an "in patient" or if any one of the following injuries are sustained whether or not he or she is detained in the hospital such as fractures, concussions, internal injuries, crushing, severe cuts and lacerations or severe general shock requiring medical treatment and victim may or may not require ICU admission.

"**Spares**" shall have the meaning as set forth in Clause 17.3.2;

"**Specifications and Standards**" means the specifications and standards relating to the quality, quantity, capacity and other requirements for the Buses and Maintenance Depots, as set forth in Schedule-B, and any modifications thereof, or additions thereto, as included in the design and engineering for the Buses submitted by the Operator to, and expressly approved by, the Authority;

"**Specified Assets**" means and includes such of the Project Assets which are constructed, acquired or installed after the [5th (fifth)] anniversary of COD, but before the [10th (tenth)] anniversary thereof; and but shall in no case include land.

"**Specified Documents**" shall have the meaning as set forth in

Clause 40.1; "**Start Punctuality**" shall have the meaning as set

forth in Clause 20.4.1; "**State**" means the State of Tamil Nadu

"**State Government**" means the government of Tamil Nadu;

"**Statutory Auditors**" means a reputable firm of chartered accountants acting as the statutory auditors of the Operator under the provisions of the Companies Act, 2013 including any re-enactment or amendment thereof, for the time being in force;

"**Substitution Agreement**" shall have the meaning as set forth in Clause

35.4.1; "**Suspension**" shall have the meaning as set forth in Clause 31.1;

"**Taxes**" means any Indian taxes including the goods and services tax, excise duties, customs duties, value added tax, sales tax, local taxes, cess and any impost or surcharge of like nature (whether Central, State or local) on the goods, materials, equipment and services incorporated in and forming part of the Project, which are charged, levied or imposed by any Government Instrumentality, but excluding any interest, penalties and other sums in relation thereto imposed on any account whatsoever. For the avoidance of doubt, Taxes shall not include taxes on corporate income;

"**Termination**" means the termination of this Agreement in accordance with its terms;

"**Termination Notice**" means the communication issued in accordance with this Agreement by one Party to the other Party terminating this Agreement;

"**Termination Payment**" means the amount payable by the Authority under and in accordance with the provisions of this Agreement, upon Termination and includes Additional Termination Payment. For the avoidance of doubt, it is expressly agreed that the amount payable shall be subject to the limitations specified in Clause 32.3;

"**Tests**" means the tests as set forth in Schedule-H to determine the conformity of Buses with the provisions of this Agreement;

"Total Project Cost" means the capital cost incurred on procurement and financing of the Project, and shall be limited to the lowest of:

(a) the capital cost of the project as set forth in the Financial Package;

(b) the actual capital cost[&] of the Project upon completion as calculated below;

[&]Capital cost per bus calculated at 50% of the PK fee quoted by the bidder at Net Present Value (NPV) of Net Present Value (NPV) of all future payments, using total minimum Monthly Assured Kilometers and total Concession Period, cost of the bus will be calculated using 10.5 % discount rate, to be compounded on monthly basis. This will be calculated using the following formula.

Capital cost per bus =

$\frac{a}{r}(1-\frac{1}{(1+r)^n}$ Where, a —

Monthly equal payment for

Capital Cost

= 0.5 * L1 GCC Rate * Monthly Assured Kilometers r - Monthly discount

rate in decimals n - Concession Period in months

provided that in the event of Termination, the Total Project Cost shall be deemed to be modified to the extent of variation in WPI or Reference Exchange Rate occurring in respect of Adjusted Equity and Debt Due, as the case may be, in accordance with the provisions of this Agreement; provided further that in the event WPI increases, on an average, by more than 6% (six per cent) per annum for the period between the date hereof and COD, the Parties shall meet, as soon as reasonably practicable, and agree upon revision of the amount herein before specified such that the effect of increase in WPI, in excess of such 6% (six per cent), is reflected in the Total Project Cost. For the avoidance of doubt, it is agreed that Total Project Cost shall not include the cost of

Specified Assets.

"**Total Scheduled Bus Kilometers**" shall have the meaning as set forth in Schedule-J; "**Training Obligations**" shall have the meaning as set forth in Clause 23.1;

"**Transfer Date**" means the date of completion of the services under this Agreement or termination of the Agreement by a Termination Notice;

"**Trip Frequency**" shall have the meaning as set forth in Clause20.5.1;

"**Unscheduled Maintenance**" shall have the meaning as set forth in Clause 17.2.4;

"**User**" means a person who uses or intends to use the Buses on payment of User Fare or in accordance with the provisions of this Agreement and Applicable Laws;

"**User Fare**" means the fare payable by users for traveling on the Bus; "**Vesting Certificate**" shall have the meaning as set forth in Clause 33.5.

"**WPI**" means the Wholesale Price Index for all commodities as published by the Ministry of Industry, Government of India and shall include any index which substitutes the WPI, and any reference to WPI shall, unless the context otherwise requires, be construed as a reference to the WPI published for the period ending with the preceding month

IN WITNESS WHEREOF THE PARTIES HAVE EXECUTED AND DELIVERD THIS AGREEMENT AS OF THE DAY, MONTH AND YEAR FIRST ABOVE WRITTEN.

SIGNED, SEALED AND DELIVERED For and on behalf of THE AUTHORITY by:	THE COMMON SEAL OF OPERATOR has been affixed pursuant to the resolution passed by the Board of Directors of the Operator at its meeting held on the..... day of 20..... hereunto affixed in the presence of _____Director, who has signed these presents in token thereof and _____ Company Secretary Authorised Officer who has countersigned the same in token thereof:
(Signature) (Name) (Designation) (Address) (E-mail Address)	(Signature) (Name) (Designation) (Address) (E-mail Address)
In the presence of: 1.	2.

SCHEDULES

SCHEDULE-A: SITE OF THE MAINTENANCE DEPOT

(See Clause 10.1)

1. The Depot Site

1.1 Depot Site shall include the land described in Annex-I of this Schedule-A.

1.2 An inventory of the Site including the land, buildings, structures, road works, trees and any other immovable property on, or attached to the Site shall be prepared jointly by the Authority Representative and the Operator, and such inventory shall form part of the memorandum referred to in Clause 10.3.1 of the Agreement.

Annex - I

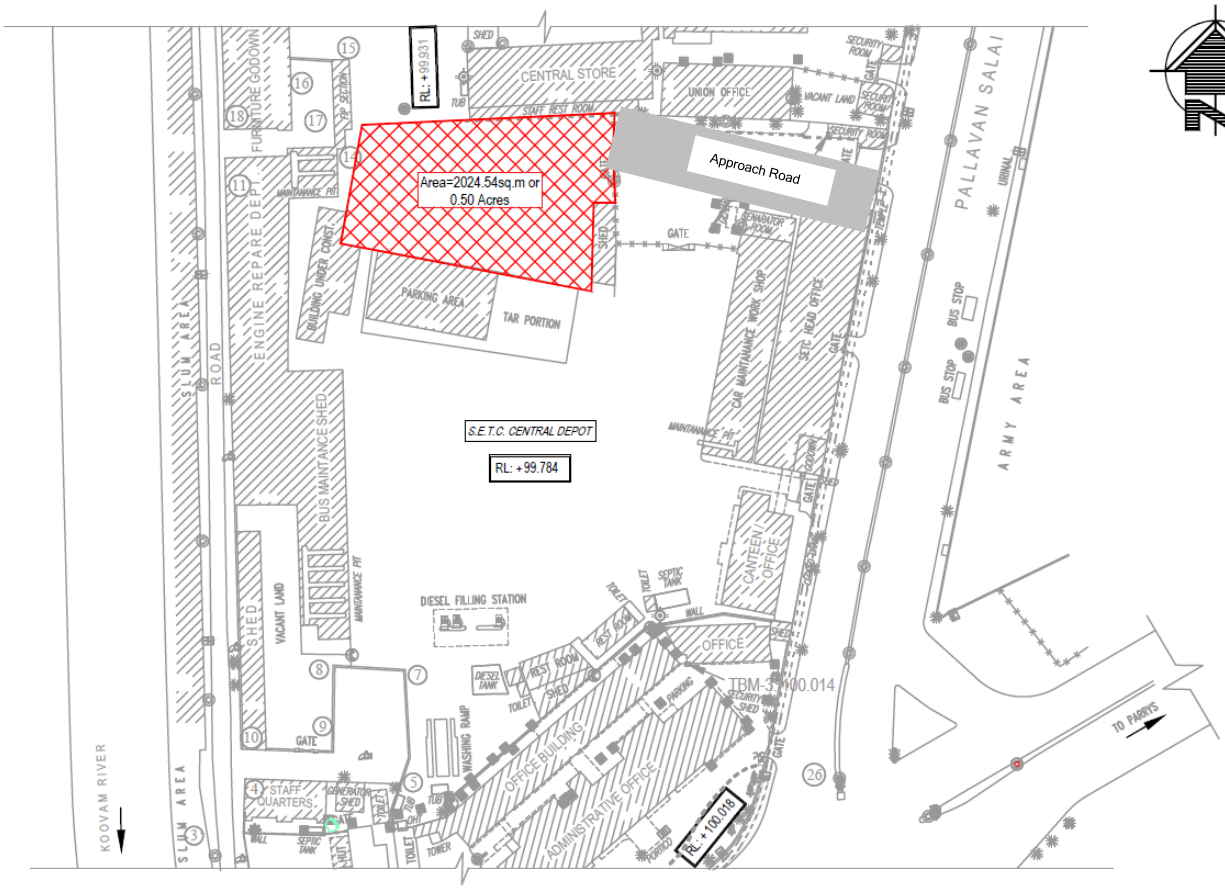
Site of the Depot

The details of the depots are provided in the table below:

Depot Name	Extent in Acre of Allocated Area within the Depot	Double Decker buses
Central Depot-2	0.5	20

Note: The aforesaid Depot to be handed over to the Operator is indicative and shall be finalized prior to the signing of Concession Agreement. The handing over of the Depot shall be in terms of Article 4.1.2, 10.2.4 and 10.2.5 shall be notified to the Operator at the time of execution of this Agreement.

a. Central Depot-2



SCHEDULE-B: SPECIFICATIONS AND STANDARDS

(See Clause 12.5.1)

1. The Operator shall comply with the Bus Specifications (including specifications for ITS) set forth in Schedule AA — Technical Specifications for procurement of Buses.
2. Latest bus specifications, currently [Urban Bus Specifications - II issued by Ministry of Urban Development, GoI in April 2013, the AIS 052 — Bus Body Code issued by the Automotive Research Association of India ("ARAI") in 2015, and the Central Motor Vehicles Rules, 1989], should be followed unless changes are specified to this schedule by the Authority.
3. Subject to the provisions of this Schedule, procurement of Bus shall conform to Applicable Laws and the latest bus specifications published by Ministry of Housing and Urban Affairs, GoI. An authenticated copy of the latest bus specifications has been provided to the Operator as part of the RFP.
4. Deviations from the aforesaid bus specifications shall be listed out here. Such deviations shall be specified only if they are considered essential in view of project-specific requirements.
5. Deviations from bus specifications to be devised by the operator to conform with universal accessibility principles and provisions for women's safety- such as installing panic buttons / CCTV cameras lower handrails for women / additional space for packages.
6. The Operator shall comply with Code of Practice for Bus Body Design and Approval [AIS-052 (Rev 1) & Amendments. 1 to 9].

SCHEDULE-C : APPLICABLE PERMITS

(See Clause 4.1.3)

I. The following permits shall be obtained by the Operator:

1. For Buses
   - (a) Commercial Vehicle Permit
   - (b) Certificate of Registration of Buses
   - (c) Certificate of Fitness
   - (d) Bus Insurance
   - (e) Customs Clearance Certificate (if needed)
2. For Maintenance Depot

   Any civil and electrical work executed by the operator to support operations and maintenance of buses is required to be submitted to the Authority for approval. Post the approval of the Authority, the operator is required to identify the applicable permits required for execution of the works and fitments. The operator will be required to complete the applicable permission from the concerned state and local authorities with support in documentation and submission from the Authority. The cost of applicable permits is to be borne by the Operator.

   - (a) Fire safety clearance from Fire Department
   - (b) Insurance for Depot, Electrical & Civil Infrastructure and other Authority owned assets
   - (c) Customs Clearance Certificate for any testing or maintenance equipment (if needed)
   - (d) Clearance of Pollution Control Board for installation of diesel generator sets
   - (e) License for use of explosives (if needed)
   - (f) License from Inspector of factories or other competent authority for setting up of Batch Plant (if needed)
   - (g) Clearance of Pollution Control Board for Asphalt Plant (if needed)
   - (h) Any other permits or clearances required under Applicable Laws

II. The following permits shall be procured by the Authority:

1. No Objection Certificate from State Transport Department as applicable, from all concerned governments/authorities
2. Fare Notification
3. Stage Carriage Permit (if applicable in the course of the Concession Period. At present exempted under Sec 56 of the Motor Vehicles Act, 1988)
4. Conductor's License
5. Applicable permits for Buildings/ Building Plans from concerned (as per requirement)
6. Permission of State Government for cutting of trees (if needed)
7. Permission of State Government for Water supply (if needed)
8. Applicable Environment Clearance from State Government (as per requirement)

SCHEDULE-D : PERFORMANCE SECURITY

(See Clause 9.1)

. . . . . Government of ,

. . . . . .

. . . . . .

WHEREAS:

A. **The Managing Director of MTC**, acting through {.....}, [•], and having its head office at {_____} (hereinafter referred to as the "**Authority**" or, which expression shall, unless excluded by and/or repugnant to the context, mean and include its successors, legal representatives and permitted assigns) of the one part;

AND

{****** Limited}, having its registered office at {.....} represented through its ****** (hereinafter referred to as the "**Operator**", which expression shall, unless it be repugnant or contrary to the subject or context thereof, be deemed to mean and include its legal representatives, successors and permitted assigns) of the other part.

The Authority and the Operator are hereinafter collectively referred to as the "**Parties**" and individually as a "**Party**".

B. The Agreement requires the Operator to furnish a Performance Security to the Authority in a sum of Rs . . . . . (Rupees only) (the "**Guarantee Amount**") as security for due and faithful performance of its obligations, under and in accordance with the Agreement, during the term of the Agreement Period (as defined in the Agreement).

C. We, ... through our Branch at (the "Bank") have agreed to furnish this Bank Guarantee by way of Performance Security.

NOW, THEREFORE, the Bank hereby, unconditionally and irrevocably, guarantees and affirms as follows:

1. The Bank hereby unconditionally and irrevocably guarantees the due and faithful performance of the Operator's obligations during the Agreement Period, under and in accordance with the Agreement, and agrees and undertakes to pay to the Authority, upon its mere first written demand, and without any demur, reservation, recourse, contest or protest, and without any reference to the Operator, such sum or sums up to an aggregate sum of the Guarantee Amount as the Authority shall claim, without the Authority being required to prove or to show grounds or reasons for its demand and/or for the sum specified therein.
2. A letter from the Authority, under the hand of an Officer not below the rank of the . . . . . , that the Operator has committed default in the due and faithful performance of all or any of its obligations under and in accordance with the Agreement shall be conclusive, final and binding on the Bank. The Bank further agrees that the Authority shall be the sole judge as to whether the Operator is in default in due and faithful performance of its obligations during the Agreement Period under the Agreement and its decision that the Operator is in default shall be final, and binding on the Bank, notwithstanding any differences between the Authority and the Operator, or any dispute between them pending before any court, tribunal, arbitrators or

any other authority or body, or by the discharge of the Operator for any reason whatsoever.

3. In order to give effect to this Guarantee, the Authority shall be entitled to act as if the Bank were the principal debtor and any change in the constitution of the Operator and/or the Bank, whether by their absorption with any other body or corporation or otherwise, shall not in any way or manner affect the liability or obligation of the Bank under this Guarantee.
4. It shall not be necessary, and the Bank hereby waives any necessity, for the Authority to proceed against the Operator before presenting to the Bank its demand under this Guarantee.
5. The Authority shall have the liberty, without affecting in any manner the liability of the Bank under this Guarantee, to vary at any time, the terms and conditions of the Agreement or to extend the time or period for the compliance with, fulfilment and/ or performance of all or any of the obligations of the Operator contained in the Agreement or to postpone for any time, and from time to time, any of the rights and powers exercisable by the Authority against the Operator, and either to enforce or forbear from enforcing any of the terms and conditions contained in the Agreement and/or the securities available to the Authority, and the Bank shall not be released from its liability and obligation under these presents by any exercise by the Authority of the liberty with reference to the matters aforesaid or by reason of time being given to the Operator or any other forbearance, indulgence, act or omission on the part of the Authority or of any other matter or thing whatsoever which under any law relating to sureties and guarantors would but for this provision have the effect of releasing the Bank from its liability and obligation under this Guarantee and the Bank hereby waives all of its rights under any such law.
6. This Guarantee is in addition to and not in substitution of any other guarantee or security now or which may hereafter be held by the Authority in respect of or relating to the Operator for the fulfilment, compliance and/or performance of all or any of the obligations of the Operator under the Agreement.
7. Notwithstanding anything contained hereinbefore, the liability of the Bank under this Guarantee is restricted to the Guarantee Amount and this Guarantee will remain in force until a period of 60 (sixty) days from one year of COD and unless a demand or claim in writing is made by the Authority on the Bank under this Guarantee, no later than 3 (three) months from the date of expiry of this Guarantee, all rights of the Authority under this Guarantee shall be forfeited and the Bank shall be relieved from its liabilities hereunder.
8. The Bank undertakes not to revoke this Guarantee during its currency, except with the previous express consent of the Authority in writing, and declares and warrants that it has the power to issue this Guarantee and the undersigned has full powers to do so on behalf of the Bank.
9. Any notice by way of request, demand or otherwise hereunder may be sent by post addressed to the Bank at its above referred Branch, which shall be deemed to have been duly authorised to receive such notice and to effect payment thereof forthwith, and if sent by post it shall be deemed to have been given at the time when it ought to have been delivered in due course of post and in proving such notice, when given by post, it shall be sufficient to prove that the

envelope containing the notice was posted and a certificate signed by an officer of the Authority that the envelope was so posted shall be conclusive. This Guarantee shall come into force with immediate effect and shall remain in force and effect until the 30 (thirty) days from the expiry of the Concession Period or until it is released earlier by the Authority pursuant to the provisions of the Agreement.

Signed and sealed this _____day of_____, 20___ at _____

SIGNED, SEALED AND DELIVERED

For and on behalf of the BANK by:

(Signature)

(Name)

(Designation)

(Code Number)

(Address)

NOTES:

i. The bank guarantee should contain the name, designation and code number of the officer(s) signing the guarantee.

ii. The address, telephone number and other details of the Head Office of the Bank as well as of issuing Branch should be mentioned on the covering letter of issuing Branch.

SCHEDULE-E : MAINTENANCE DEPOT COMPLETION SCHEDULE

(See Clause 12.5.1)

1. Completion Schedule

During Construction Period, the Operator shall comply with the requirements set forth in this Schedule- E for each of the Project Milestones and Scheduled Maintenance Depot Completion Date (the "**Maintenance Depot Completion Schedule**"). Within 15 (fifteen) days of the date of each Project Milestone, the Operator shall notify the Authority of such compliance along with necessary particulars thereof.

2. The following components, inter alia, of the Maintenance Depot shall be periodically reviewed by the Authority post completion and handover of the respective Maintenance Depot:

(a) Structural Work

(b) Electrical Work

(c) IT/Telecom system

(d) Fire safety system

(e) Water supply system

(f) Drainage system

(g) Security System

(h) ETP, waste disposal systems and other systems & its compliances as stated in EHS requirements in Schedule AB

3. Extension of period

Upon extension of any or all of the aforesaid Project Milestones or the Scheduled Maintenance Depot Completion Date, as the case may be, under and in accordance with the provisions of this Agreement, the Maintenance Depot Completion Schedule shall be deemed to have been amended accordingly.

SCHEDULE-F : DESIGN AND DRAWINGS

(See Clause 12.4 and 13.4)

1 Designs and Drawings

1.1 In compliance of the obligations set forth in Clause 12.4 of this Agreement, the Operator shall furnish to the Authority, free of cost, all Designs and Drawings listed in clause 3 of this Schedule- F; provided that the Designs and Drawings relevant for design review by the Authority as specified in Clause 13.4.2, shall be submitted prior to such review.

1.2 For the purposes hereof, Design shall mean and include plans and Drawings of the Buses or sub- system or equipment thereof. Provided that the Operator may share only details regarding the layout of the bus and not any other propriety information.

1.3 All Designs shall include maintenance and service manual of the respective sub-systems.

1.4 All Designs and Drawings shall be supplied in hard copy, in duplicate, and in electronic form.

1.5 All Designs and Drawings shall conform to and refer to the relevant provisions in the Specifications and Standards.

1.6 All Designs and Drawings shall be in English.

2 Additional Designs and Drawings

If the Authority determines that for discharging its duties and functions under this Agreement, it requires any Designs or Drawings other than those listed in this schedule, it may by notice require the Operator to prepare and furnish such Designs and Drawings forthwith. Upon receiving a requisition to this effect, the Operator shall promptly prepare and furnish such Designs and Drawings to the Authority, as if such Designs and Drawings formed part of this Schedule F.

3 Bus Designs and Drawings

In compliance with the requirement under Clause 13.4.1, the Operator shall provide the following Designs and Drawings:

(i) General schematic Drawings

(ii) Bus offer drawing attached Layout

(iii) Front, rear and both side views of the offered design of the Bus

SCHEDULE-G : DELIVERY SCHEDULE

(See Clause 13.3)

A. Delivery Schedule for Double Decker Buses

Lot No.	Type of Bus	Number of Buses	Timeline for delivery of Buses
1	Double Decker Buses	Minimum 50% of the Quantity awarded as per the LOA	Within 1 months from Appointed Date
2		100% of the Quantity awarded as per the LOA	Within 3 months from Appointed Date

The Operators are required to plan the activities like Financial close, prototype testing etc., in such a manner so that the above-mentioned timelines are achieved.

Note:

1. Total number of buses are exclusive of the reserve fleet.
2. The Authority reserves the right to alter the number of buses/ timelines under exigent conditions.

SCHEDULE-H : TESTS

(See Clause 13.5)

1 Tests

1.1 Save and except as otherwise provided in this Agreement, the Operator shall conduct, or cause to be conducted, each of the Tests specified in this Schedule-H.

1.2 The Authority shall conduct, or cause to be conducted, adequate trial runs of Prototypes to determine their compliance with Specifications and Standards, requirements and Safety Requirements.

1.3 Tests to be conducted on the Prototype or its sub-systems, as the case may be, (the "**Type Tests**") have been specified in Annex-I of this Schedule-H and routine tests to be carried out on all Buses (the "**Routine Tests**") as per the guidelines issued by the Government of India approved agencies from time to time.

1.4 The Operator shall provide the results of all Tests to the Authority for review and comments, if any.

2 Schedule for Tests

2.1 The Operator shall, not later than 4 weeks prior to the likely date of conducting a Type Test, notify the Authority of its intent to conduct the Test and furnish particulars of the equipment and methodology forming part of the Test.

2.2 The Operator shall notify the Authority of its intent to conduct the Type Test, referred to in paragraph 2.1 above, at any time after 4 weeks days from the date of such notice. The notice shall specify the place, date and time of such Test. Upon receipt of such notice, the Authority may, within 15 days of such notice, designate its representative to witness the Test. The Operator shall, whether or not an Authority Representative is designated, conduct the Test in accordance with Article 13.5 and this Schedule-H.

2.3 The Authority may at any time designate its representative to witness any Routine Test on a Bus and the Operator shall, upon receipt of a notice to this effect, undertake such Routine Test on a mutually agreed date, and in the presence of the Authority Representative.

3 Agency for conducting Tests

Save and except as otherwise specified, all Tests set forth in this Schedule-H shall be conducted by the Operator or such other agency or person as it may specify in consultation with the Authority.

4 Tests for Safety certification

Tests for determining the conformity of a Bus with the Safety Requirements shall be conducted in accordance with Good Industry Practice and in conformity with Applicable Laws.

5 Acceptance certificate

Upon successful completion of Tests, the Authority shall issue an Acceptance Certificate for the Prototype in accordance with the provisions of Article 13.

6 MTC may also carry out a test trial of the prototype bus for each type of Bus under

this RFP or it can accept test certifications from testing agencies listed under Section 126 of CMVR. The test trial of Prototype is to measure its performance in terms of battery capacity, battery range as well to ensure the compatibility of the charging requirement of electric bus with subsisting bus schedule. In case of any non-compliance in the final Prototype, remedial work shall be immediately carried out by the Operator at its own risk and cost. In the event of Operator not being able to showcase a Prototype meeting RFP specification within 60 days beyond the stipulated date of Prototype delivery, then, it shall be considered an event of default by the operator leading to annulment of the award of contract and termination of the agreement.

Annex - I Type Tests

In addition to the standard Type Tests of ARAI, the following tests shall be conducted for the buses:

S. No.	Applicable Tests	Standard / Regulation
1	Gradeability	AIS 003 & AIS 049
2	Pass by noise	IS 3028 & AIS 049
3	Coast Down Test	IS 14785 & AIS 049
4	Brake, Base line (Part – 3)	IS 11852 & AIS 049
5	Brake static (Part - 4)	IS 11852 & AIS 049
6	Construction and Functional safety requirements	AIS 038
7	Electrical energy consumption	AIS 039
8	Range Test	AIS 040
9	Net Power and Max 30 min power test	AIS 041
10	Safety requirements of Traction batteries	AIS 038
11	EMC	AIS 004 (Part 3) & AIS 049
12	LT Wire	AIS 052 & Flammability test as per IS:2465-1984 or latest

SCHEDULE-I : OPERATION AND MAINTENANCE REQUIREMENTS

(See Clause 16.1.1 and Clause 17.4)

Bus repair and maintenance generally calls for following activities amongst others at varying intervals / periodicity / Km operated by each bus, requirements varying with bus make, model, etc.:

(a) Daily washing and cleaning of buses.

(b) Periodic inspections and rectifications as required.

(c) Preventive Maintenance as prescribed by Bus Manufacturer in form of maintenance schedules at certain time intervals / Km plied - such maintenance generally varies with period / Km plied by various sub- systems of a Bus. As an example, periodicity of some such maintenance schedules and main activities therein are illustrated as under:

  (i) Daily maintenance - oils / lubricants, coolant, air pressure, air inflation, loose fasteners, fitments etc. - check, top up, tighten, as required.

  (ii) Monthly / bi-monthly — [•] /[•] Km operation - All activities of earlier schedules and tyre condition necessary for corrective / preventive actions.

  (iii) Quarterly — [•] Km operation - All activities of earlier schedules and brake system maintenance including but not limited to inspection, servicing, brake lining change / replacement, servicing of other brake system items, greasing etc.; vehicle electrical, lighting, alignment, etc.

  (iv) Six monthly – [•] Km - All activities of above schedules, and activities related to steering, axles, transmission, tyres, drive line, etc.

  (v) Yearly — [•] Km - All above activities and full checking / inspection of bus chassis, bus bodies and their fitments, and taking necessary corrective / preventive actions.

  (vi) Bi-annual / annual - Certification of road worthiness of buses - Initial periodicity being after two years for up to certain age then annually.

  (vii) Replacement of in-use bus aggregates at about Mean Time Between Failures (MTBF) to prevent failures and consequent costs and inconvenience.

(d) Running repairs upon driver complaints/ report etc.

(e) Break down repairs on-site of Bus failures.

(f) Towing of failed Bus to a depot workshop and repairing the bus failures.

(g) Accidental vehicles' towing and or repairs.

(h) Preparation of buses for periodic roadworthiness certification which includes all types of denting / painting of bus bodies / bus body items and operational functionality of chassis items and the bus as a whole.

(i) Bus body and related items repairs / replacements etc. on the basis of periodic inspections / crew reports/ general presentation aspects / operational problems reported by commuters / any other stake holders, etc.

(j) Major repairs /calibrations of bus aggregates such as rear axle, traction motor, etc.

(k) Replacement of failed aggregates with new / serviceable ones.

(l) Removal, dismantling, repairing, assembling and re-fitment of tyres and rims to buses.

(m) Repair, replacement of electrical, electronic, ITS, lighting, etc. items, subsystems etc.

(n) Removal, replacement of items failing due to operational wear and tear, such as brake and clutch lining, etc.

(o) Repair / replacement of seats, upholstery; cleaning, dusting and washing upholstery.

(p) Denting / painting of buses as per requirement.

(q) Reconditioning of Bus aggregates such as transmission, axles, steering system, electrical, etc.

(r) Retrieval of spare parts during / for above processes.

(s) Repair and re-treading of tyres / repair of tubes.

(t) Major accidental repair of buses including chassis, bus body and related items.

(u) Acquisition, storage, inventory management, distribution, scrapping and disposal of spares / items / materials / vehicles etc.

(v) Any other activity related to operation and maintenance of buses.

(w) Infrastructure and other requirements for repair and maintenance functions of Bus, such as:

- (i) Bus depot duly equipped with requisite plant and equipment, machinery, tools, jigs and fixtures, etc.
- (ii) Other facilities as under:
  - a. Washing facilities complete with washing machine, water storage and treatment facilities, etc.,
  - b. Charging infrastructure,
  - c. Service pits / ramps etc.,
  - d. Painting facilities,
  - e. Welding - electric arc and oxy-acetylene gas based,
  - f. Tyre repair facilities,
  - g. Air compressor and air inflation facilities,
  - h. Utilities, administrative, accounts, stores, and other related facilities, and
  - i. Breakdown van / recovery / towing vehicle etc.
  - j. Depot yard lighting- high mast type, search lights etc.
- (iii) Operator Control Centre facilities duly equipped with microprocessors, communications and other related facilities.
- (iv) Trained staff for various trades and shifts of work.
- (v) Documents, schedules, manuals etc. for maintenance activities; specifications of spares, etc.

SCHEDULE-J : DEPLOYMENT PLAN

(See Clause 16.5)

The Deployment Plan should include list of Operational Routes including schedule of buses, description of bus stops frequencies, headway, number of Buses to be deployed on each Route, and any other information the Authority intends to include.[11]

Route Number	From	Via	To	Span of Operations	Number of Buses	Headway	List of Bus Stops

Additionally, the Authority is require to present detailed bus operations schedule including details such as trip start time, trip end time, trip length, staff breaks and shift changes and other details to the operator to ensure planning and installation of chargers and allied downstream charging infrastructure for the operations of the provided schedules.

SCHEDULE-K : SAFETY REQUIREMENTS

(See Clause 18.1)

1. General Safety Requirements

1.1 The Operator shall be responsible for all safety matters related to the performance of the Project and shall manage on behalf of the Authority all safety requirements related to the Bus Service in accordance with all Applicable Laws.

1.2 Without prejudice to the Operator's obligation to ensure all the safety aspects during the Bus Operations, the Operator shall:

(a) comply with Applicable Laws;

(b) undertake all necessary measures to ensure the safety of all the passengers, contractors, staff and the general public; and

(c) consult with Authority and adopt the requirements of the emergency services;

2. Safety Planning

The Operator shall participate in any safety and emergency planning with relevant third parties, which shall include the Authority and the emergency services which together makes a forum. This forum will consider and agree the safety related matters and safety risks associated with the Project, consult with relevant internal and external stakeholders and examine these risks in a thorough manner and plan the appropriate contingencies.

3. Safety Management

The Operator shall develop safety procedures for the Project and shall implement the safety procedures throughout the Concession Period.

4. Applicable Laws

The Operator shall, after prior consultation with the Authority, implement all alterations to the Bus Service which are required by any Applicable Laws which comes into force after the Effective Date relating to safety.

4.1 The Operator along with its Sub-Contractors shall comply with all the statutory requirements.

5. Response to Emergencies

The Operator shall react safely and quickly to emergencies in all aspects of the Project.

5.1 The Operator shall co-operate with relevant Fire Services, Police, and any other Government Instrumentalities wherever necessary.

5.2 The Operator shall develop an Emergency Management Plan that sets out its predetermined actions to provide a response to a major crisis or emergency occurring at Maintenance Depots, and en-Route Buses (the "**Emergency Management Plan**").

5.3 In developing the Emergency Management Plan, the Operator shall consult with all relevant Government Instrumentalities, emergency services and local authorities.

5.4 All personnel designated to carry out specific responsibilities under the Emergency

Management Plan are expected to know and understand the policies and procedures outlined in the Plan. The response to any major crisis or disturbance shall always be conducted within the framework of the Plan.

5.5 The Operator shall ensure that all staff are given clear instructions in line with the Emergency Management Plan, including training to deliver public address announcements in a way that avoids causing alarm and that instils confidence in passengers that the matter is under control.

6. Reporting of Incidents

The Operator shall comply with all Applicable Laws relating to the reporting of accidents, incidents, severe accidents, injuries, and dangerous occurrences. The Operator shall liaise with the Authority in relation to the reporting of any incident and the future measures to be taken to prevent the recurrence thereof.

6.1 The Operator shall comply with all Applicable Laws relating to the reporting of accidents, incidents, sexual harassment, fatalities, injuries, and dangerous occurrences.

SCHEDULE-L: MAINTENANCE DEPOT EQUIPMENT
(See Clause 17.1)

The operator shall install the following list of equipment to ensure majority of the periodic and unscheduled maintenance activities are carried out at the maintenance depot. The equipment required to be installed at the depot must include the list of equipment provided below. The list is inclusive and not exhaustive and operator shall install additional tools/equipment to ensure maintenance activities of the bus may be undertaken at the depots.

S. No.	Equipment
1.	Washing pumps with guns
2.	Fully automatic two/ three brushes bus washing machine with simultaneous chassis and wheel washing arrangement and complete with waste water treatment and recycling system
3.	Heavy duty vacuum cleaner
4.	Fire safety equipment set
5.	Air compressor
6.	Paint booth complete with environment control, paint drying system, etc.
7.	Lathe machine complete with general tools, jigs and fixtures (optional)
8.	Radial drilling machine (optional)
9.	Brake drum turning / re-boring machine (optional)
10.	Hydraulic press
11.	Brake efficiency assessment system
12.	Wheel alignment
13.	Head light beam aligner
14.	Grease pump (Air operated)
15.	Hand held grease pump
16.	Pedestal mounted and portable digital, with auto cut-off, tire inflation system
17.	Nitrogen tire inflation
18.	Tire - wheel rim dismantling and assembling system / tyre changer
19.	Wheel balancing equipment
20.	Auto electrical test bench
S. No.	**Equipment**
21.	AC gas charger with AC gas cylinders
22.	Battery charger auto cut-off system
23.	Battery tester
24.	Multi-function tester
25.	Hydraulic jack
26.	Hydraulic pallet trolley
27.	Battery operated forklift truck
28.	Break down relief van
29.	Power cutter
30.	Pneumatic impact tools kit
31.	Portable electric welding machine
32.	Portable gas welding machine

33.	Full set of hand tools, including torque wrench, measuring instruments, gauges
34.	Riveting tools, hand drills, riveting guns / equipment
35.	Sheet metal / tubing / structural items cutting, forming facilities / equipment; plywood and upholstery cutting and fabrication facilities
36.	Work benches, bench vices. Hand drills, jigs and fixtures, clamping devices,

Additionally, the operator shall set up administrative and training facilities at the maintenance depots for monitoring of operations, staff training and resting facilities and incident management at the depots.

S. No	**Equipment**
37.	Storage facilities for: new materials, spares, aggregates, tyres, oils and lubricants repairable as above scrapped and disposable items as above
38.	Vehicles for transportation of materials, stores and spares
39.	Basic Operator Control Centre equipment including those related to IT, ITS, communication, display, etc. - hardware and software
40.	1 (one) Simulator for driver training in the Depot
41.	Capacity building /training facilities and equipment
S. No	**Equipment**
42.	Complete set of workmen cupboards, rest room facilities
43.	Office furniture, cup boards, all other office requirements
44.	All utilities- phones, fax, mobile phones, printers, etc. for workshop and other offices
45.	Vehicles for officers, checking, attending to alerts /emergencies
46.	Safety and security equipment / facilities (CCTV (Min 6 Mega Pixel) covering entire Depot including interior of Buildings to be provided by Operator and live feed to be shared to Authority.)
47.	Water cooler with water filter / purifier
48.	Desktops and laptops, printers, related hardware and software

SCHEDULE-M : ESCROW AGREEMENT

(See Clause 27.1)

THIS ESCROW AGREEMENT is entered into on this the ……. day of ……. 20…..

AMONGST

_____Limited, a company incorporated under the provisions of the Companies Act, 2013 and having its registered office at (hereinafter referred to as the "**Operator**" which expression shall, unless repugnant to the context or meaning thereof, include its successors, permitted assigns and substitutes);

_____(name and particulars of the Escrow Bank) and having its registered office at (hereinafter referred to as the **"Escrow Bank"** which expression shall, unless repugnant to the context or meaning thereof, include its successors and substitutes); and

_____(name and particulars of Lenders' Representative) and having its registered office at _____ acting for and on behalf of the Senior Lenders as their duly authorized agent with regard to matters arising out of or in relation to this Agreement (herein after referred to as the **"Lenders' Representative"** which expression shall, unless repugnant to the context or meaning thereof, include its successors and substitutes);

The Authority of_____, represented by _____ and having its principal offices at ******] (hereinafter referred to as the "**Authority**" which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors and assigns).

The Operator, Lender Representatives, the Escrow Bank and the Authority shall collectively be referred as Parties and individually as Party, as the context requires

WHEREAS

(A) The Authority has entered into a Supply cum Operation and Maintenance Agreement dated
……. with the Operator (the "**Concession Agreement**") for procurement, supply, operation and maintenance of Double Decker Air-Conditioned electric buses and development of allied electric and civil infrastructure on gross cost contracting and a copy of which is annexed hereto and marked as Annex-A to form part of this Agreement.

(B) Senior Lenders have agreed to finance the Project in accordance with the terms and conditions set forth in the Financing Agreements.

(C) The Concession Agreement requires the Authority and the Operator to execute this Escrow Agreement, *inter alia*, on the terms and conditions stated therein.

NOW THEREFORE, in consideration of the foregoing and the respective covenants and agreements set forth in this Agreement, the receipt and sufficiency of which is hereby acknowledged, and intending to be legally bound hereby, the Parties agree as follows:

1. **DEFINITIONS AND INTERPRETATION**

1.1 Definitions

In this Agreement, the following words and expressions shall, unless repugnant to the context or meaning thereof, have the meaning hereinafter respectively assigned to them:

"**Agreement**" means this Escrow Agreement and any amendment thereto made in accordance with the provisions contained herein;

"Contract" means the Concession Agreement and annexed hereto as Annex-A, and shall include all of its contents including any amendments made thereto, Recitals, Schedules in accordance with the provisions contained in this behalf therein;

"**Cure Period**" means the period specified in this Agreement for curing any breach or default of any provision of this Agreement by the Operator or the Authority, as the case may be and shall commence from the date on which a notice is delivered by the Authority or Operator, to the Operator or the Authority, as the case may be, with either the Operator or the Authority asking the other Party to cure the breach or default specified in such notice;

"**Designated Account**" shall mean the account created by GoTN under the Government Order

"Designated Cash Flow" shall mean any and all monies/amounts received, receivable and/or to be received directly or indirectly, in any form, including cash, cheques, demand drafts, pay orders, electronic transfer or in any other form and all such monies/amounts, with respect to the following.

(a) an amount to maintain the Minimum Escrow Balance;
(b) any other deposits/amounts made by the Authority for the Project
(c) all grants, payments and financial support received from the State Government in relation to the Project;
(d) all revenues generated and all the income accruing from the Project including but not limited to the User Fare and advertising revenue, deposits, etc. ; and

(e) any other revenues or capital receipts from or in respect of the Project.

"**Escrow Account**" shall mean and include the account which the Authority shall open and establish with the Escrow Bank in relation to the Project and shall be an interest-bearing current account having account number as specified in **Annex A** opened and maintained with [__branch] of Escrow Bank, which shall be operated on the terms and conditions contained in this Agreement and as per Applicable Laws in which flows and outflows of cash on account of capital and revenue receipts and expenditures shall be credited and debited, as the case may be in accordance with the provisions of the Contract.

"**Escrow Default**" shall have the meaning ascribed thereto in Clause 6.1;

"Lenders' Representative" means the person referred to as the Lenders' Representative in the foregoing Recitals;

"**Financial Institution/Third Party"** means, in relation to any payment an entity appointed by the Government of Tamil Nadu pursuant to the Government Order

"Govt Order/Notification" shall mean Government of Tamil Nadu vide Government Order No.

"Minimum Escrow Balance" shall mean deposit in the Escrow Account a sum equal to 3 (three) months' estimated Fees payable under the Contract by the Authority to the Operator.

"**Parties**" means the parties to this Agreement collectively and "Party shall mean any of the Parties to this Agreement individually;

"**Payment Date**" means, in relation to any payment specified in Clause 4.1, the date(s) specified for such payment; and

"Project" means the supply, operation and maintenance of Buses and the Fit Out Works, operation and maintenance of the Maintenance Depots in accordance with the provisions of the Contract and includes all works, services and equipment relating to or in respect of the Scope of the Contract.

1.2 Interpretation

1.2.1 References to Lenders' Representative shall, unless repugnant to the context or meaning thereof, mean references to the Lenders' Representative, acting for and on behalf of Senior Lenders.

1.2.2 The words and expressions beginning with capital letters and defined in this Agreement shall have the meaning ascribed thereto herein, and the words and expressions used in this Agreement and not defined herein but

defined in the Contract shall, unless repugnant to the context, have the meaning ascribed thereto in the Contract.

1.2.3 References to Clauses are, unless stated otherwise, references to Clauses of this Agreement.

1.2.4 The rules of interpretation stated in Clauses 1.2, 1.3 and 1.4 of the Contract shall apply,
mutatis mutandis, to this Agreement.

2 ESCROW ACCOUNT

2.1 Escrow Bank to act as trustee

2.1.1 The Authority hereby appoints the Escrow Bank to act as trustee for the Authority, the Lenders' Representative and the Operator in connection herewith and authorises the Escrow Bank to exercise such rights, powers, authorities and discretion as are specifically delegated to the Escrow Bank by the terms hereof together with all such rights, powers, authorities and discretion as are reasonably incidental hereto, and the Escrow Bank accepts such appointment pursuant to the terms hereof.

2.1.2 The Authority hereby declares that all rights, title and interest in and to the Escrow Accounts shall be vested in the Escrow Bank and held in trust for the Authority, Lenders' Representative and the Operator, and applied in accordance with the terms of this Agreement. No person other than the Authority, the Lenders' Representative and the Operator shall have any rights hereunder as the beneficiaries of, or as third party beneficiaries under this Agreement.

2.2 Acceptance of Escrow Bank

The Escrow Bank hereby agrees to act as such and to accept all payments and other amounts to be delivered to and held by the Escrow Bank pursuant to the provisions of this Agreement. The Escrow Bank shall hold and safeguard the Escrow Accounts during the term of this Agreement and shall treat the amount in the Escrow Accounts as monies deposited by the Operator, Senior Lenders or the Authority with the Escrow Bank. In performing its functions and duties under this Agreement, the Escrow Bank shall act in trust for the benefit of, and as agent for, the Authority, the Lenders' Representative and the Operator or their nominees, successors or assigns, in accordance with the provisions of this Agreement.

2.3 Establishment and operation of Escrow Account

2.3.1 Within {insert number of days} days from the date of this Agreement, and

in any case prior to the Appointed Date, the Authority shall open and establish the Escrow Account with the… (name of Branch) Branch of the Escrow Bank. The Escrow Account shall be denominated in Rupees.

2.3.2 The Escrow Bank shall maintain the Escrow Account in accordance with the terms of this Agreement and its usual practices and applicable regulations and pay the maximum rate of interest payable to similar customers on the balance in the said account from time to time.

2.3.3 The Escrow Bank and the Authority shall, after consultation with the Operator and the Authority agree on the detailed mandates, terms and conditions, and operating procedures for the Escrow Account, but in the event of any conflict or inconsistency between this Agreement and such mandates, terms and conditions, or procedures, this Agreement shall prevail.

2.3.4 The Authority covenants, that in the event of shortfall of the Minimum Escrow Balance in the Escrow Account at any time during the duration of this Escrow Agreement, the Escrow Bank shall have irrevocable authority to intimate the "Financial Institution/Third Party" that the Escrow Account is short of such amount as is required to maintain the Minimum Escrow Balance and the "Financial Institution/Third Party" shall upon mere intimation from the Escrow Bank in this regard without any further confirmation from the Authority, transfer such amount as is required to maintain the Minimum Escrow Balance in the Escrow Account.

2.4 Escrow Bank's fee

The Escrow Bank shall be entitled to receive its fee and expenses in an amount, and at such times, as may be agreed between the Parties. Such fee and expenses shall be appropriated from the Escrow Accounts in accordance with Clause 4.1.

2.5 Rights of the parties

Save and except as otherwise provided in the Concession Agreement, The rights of the Authority, the Lenders' Representative and the Operator in the monies held in the Escrow Account are set forth in their entirety in this Agreement and the Authority, the Lenders' Representative and the Operator shall have no other rights against or to the monies in the Escrow Account.

2.6 Substitution of the Operator

The Parties hereto acknowledge and agree that upon substitution of the Operator with the Nominated Company, pursuant to the Substitution Agreement, it shall be deemed for the purposes of this Agreement that

the Nominated Company is a Party hereto and the Nominated Company shall accordingly be deemed to have succeeded to the rights and obligations of the Operator under this Agreement on and with effect from the date of substitution of the Operator with the Nominated Company.

3 DEPOSITS INTO ESCROW ACCOUNTS

3.1 Deposit by the Authority

3.1.1 The Authority agrees and undertakes that it shall ensure that the Escrow Account shall have a sum equal to 3 (three) times the (1) one month estimated Fee payable to the Operator on the first day of every month ("Minimum Escrow Balance") and the Authority shall deposit or cause to be deposited into and/or credit the Escrow Account a sum so as to maintain Minimum Escrow Balance.

3.1.2 The Authority agrees and undertakes that it shall deposit or cause to be deposited into and/or credit the Escrow Account every month the Designated Cash Flow amount.

3.1.3 Any amounts towards Termination Payment due to the Operator.

3.1.4 All payments due to the Operator towards any Damages payable by the Authority under and in accordance with the terms of this Agreement.

3.2 Interest on deposits

The Escrow Bank agrees and undertakes that all interest accruing on the balances of the Escrow Account shall be credited to the Escrow Account; provided that the Escrow Bank shall be entitled to appropriate therefrom the fee and expenses due to it from the Authority in relation to the Escrow Account and credit the balance remaining to the Escrow Account.

3.3 Deposit by the Operator

(a) All money received in relation to the Project from any source, including the Senior Lenders, Lenders of Subordinated Debt and the Authority;

(b) Amount received amount towards insurance claims, if any, received.

3.4 Deposit from the Designated Account

Amount towards ensuring Minimum Escrow Balance from the Designated Account in terms of Clause 22.6.1 of the Concession Agreement.

3.5 Deposits by Senior Lenders

The Lenders' Representative agrees, confirms and undertakes that the Senior Lenders shall deposit into and/or credit the Escrow Account with all disbursements made by them in relation to or in respect of the Project; provided that notwithstanding anything to the contrary contained in this Agreement, the Senior Lenders shall be entitled to make direct payments to the Bus Supplier/OEM under and in accordance with the express provisions contained in this behalf in the financing agreements.

4 WITHDRAWALS FROM ESCROW **ACCOUNT**

4.1 Withdrawals during Concession Period

4.1.1 At the beginning of every month or at such intervals as the Authority may by written instructions determine, the amount standing to the credit of the Escrow Account shall be withdrawn and appropriated in the following order by depositing such amounts for making due payments and if such payments are not due in any month, then retain such monies in the Escrow Account and pay out therefrom on the Payment Date(s):

(a) All taxes due and payable by the Operator for and in respect of the Project;

(b) All Fees due and payable to the Operator subject to and in accordance with Article 22 certified by the Authority as due and payable to it;

(c) All payments and Damages certified by the Authority as due and payable to it by the Operator; and

(d) Balance, if any, in accordance with the instructions of the Authority.
Provided further that any and all payments to the Operator from the Escrow Account under this Agreement shall be first made into the account designated by the lender(s) of the Operator.

4.2 Withdrawals upon Termination

Upon Termination of the Contract, all amounts standing to the credit of the Escrow Account shall, notwithstanding anything in this Agreement, shall be appropriated in the following order:

(a) all taxes due and payable by the Operator for and in respect of the Project;
(b) 90% (ninety per cent) of Debt Due;
(c) all payments and Damages certified by the Authority as due and payable to it by the Operator;
(d) retention and payments relating to the liability for defects and deficiencies set forth in Article 37;
(e) outstanding Debt Service including the balance of Debt Due;

(f) incurred or accrued Fees;
(g) any payments due and payable to the Authority;
(h) any other payments required to be made under this Agreement; and
(i) balance, if any, in accordance with the instructions of the Authority.

Provided that the disbursements specified in Sub-clause (i) of this Clause 4.2 shall be undertaken only after the Vesting Certificate has been issued by the Authority.

Provided further that any and all payments to the Operator from the Escrow Account under this Agreement shall be first made into the account designated by the lender(s) of the Operator.

4.3 Application of insufficient funds

Funds in the Escrow Account shall be applied in the serial order of priority set forth in Clauses 4.1. If the funds available are not sufficient to meet all the requirements, the Escrow Bank shall apply such funds in the serial order of priority until exhaustion thereof.

4.4 Application of insurance proceeds

Notwithstanding anything in this Agreement, the proceeds from all insurance claims, except life and injury, shall be deposited into and/or credited to the Escrow Account and utilised for any necessary repair, reconstruction, reinstatement, replacement, improvement, delivery or installation of the Project, and the balance remaining, if any, shall remain deposited in the Escrow Account.

5 OBLIGATIONS OF THE ESCROW BANK

5.1 Segregation of funds

Monies and other property received by the Escrow Bank under this Agreement shall, until used or applied in accordance with this Agreement, be held by the Escrow Bank in trust for the purposes for which they were received and shall be segregated from other funds and property of the Escrow Bank.

5.2 Notification of balances

15 (fifteen) business days prior to each Payment Date (and for this purpose the Escrow Bank shall be entitled to rely on an affirmation by the Authority as to the relevant Payment Dates), the Escrow Bank shall notify the Authority of the balances and any anticipated shortfall in the Escrow Account as at the close of business on the immediately preceding business day. In the event of any such shortfall, the Authority shall meet the same by crediting adequate

sums to the Escrow Account from its own financial sources.

5.3 Communications and notices

In discharge of its duties and obligations hereunder, the Escrow Bank:

(a) may, in the absence of bad faith or gross negligence on its part, rely as to any matters of fact which might reasonably be expected to be within the knowledge of the Authority upon a certificate signed by or on behalf of the Authority;

(b) may, in the absence of bad faith or gross negligence on its part, rely upon the authenticity of any communication or document believed by it to be authentic;

(c) shall, within 7 (seven) business days after receipt, deliver a copy to the Authority acting through..... (name to be specified by the Authority) of any notice or document received by the Escrow Bank (in its capacity as the Escrow Bank) from the Operator or any other person hereunder or in connection herewith; and

(d) shall, within 7 (seven) business days after receipt, deliver a copy to the Operator of any notice or document received by the Escrow Bank (in its capacity as the Escrow Bank) from the Authority or any entity in connection herewith.

5.4 No set off

The Escrow Bank agrees not to claim or exercise any right of set off, banker's lien or other right or remedy with respect to amounts standing to the credit of the Escrow Accounts. For the avoidance of doubt, it is hereby acknowledged and agreed by the Escrow Bank that the monies and properties held by the Escrow Bank in the Escrow Account shall not be considered as part of the assets of the Escrow Bank and being trust property, shall in the case of bankruptcy or liquidation of the Escrow Bank, be wholly excluded from the assets of the Escrow Bank in such bankruptcy or liquidation.

5.5 Regulatory approvals

Escrow Bank shall use its best efforts to procure, and thereafter maintain and comply with, all regulatory approvals required for it to establish and operate the Escrow Account. The Escrow Bank represents and warrants that it is not aware of any reason why such regulatory approvals will not ordinarily be granted to the Escrow Bank.

6 ESCROW DEFAULT

6.1 Authority Default

Following events shall constitute an event of default by the Authority (an "Authority Escrow Default") unless such event of default has occurred as a result of Force Majeure or any act or omission of the Operator:

(a) the Authority commits breach of this Agreement by failing to deposit any monies into the Escrow Account as provided herein and fails to cure such breach by depositing the same into the Escrow Account within a Cure Period of 30 (thirty) business days;

(b) the Authority causes the Escrow Bank to transfer funds to any account of the Authority in breach of the terms of this Agreement and fails to cure such breach by depositing the relevant funds into the Escrow Account in which such transfer should have been made, within a Cure Period of 30 (thirty) business days; or

(c) the Authority commits or causes any other breach of the provisions of this Agreement and fails to cure the same within a Cure Period of 30 (thirty) business days.

6.1.1 Operator Default

Following events shall constitute an event of default by the Operator (an "**Operator Escrow Default**") unless such event of default has occurred as a result of Force Majeure or any act or omission of the Authority:

(a) the Operator causes the Escrow Bank to transfer funds to any account of the Operator in breach of the terms of this Agreement and fails to cure such breach by depositing the relevant funds into the Escrow Account in which such transfer should have been made, within a Cure Period of 30 (thirty) business days;

(b) the Operator commits or causes any other breach of the provisions of this Agreement and fails to cure the same within a Cure Period of 30 (thirty) business days.

6.1.2 Upon occurrence of an Authority Escrow Default or Operator Escrow Default, as the case may be, the consequences thereof shall be dealt with under and in accordance with the provisions of the Contract.

7 TERMINATION OF ESCROW AGREEMENT

7.1 Duration of the Escrow Agreement

This Agreement shall unless terminated earlier by the mutual consent of the Parties or otherwise in accordance with the provisions of this Clause by written notice from the Authority and the Operator and thr to the Escrow Bank, remain in full force and effect for the duration of the Contract.

7.2 Substitution of Escrow Bank

The Authority may after consultation with the Operator, by not less than 30 (thirty) days prior notice to the Escrow Bank, terminate this Agreement and appoint a new Escrow Bank, provided that arrangements are made for transfer of amounts deposited in the Escrow Account to a new Escrow Account established with the successor Escrow Bank. The termination of this Agreement shall take effect only upon coming into force of an Escrow Agreement with the substitute Escrow Bank..

7.3 Closure of Escrow Account

The Escrow Bank shall, at the request of the Authority made on or after the payment by the Authority of all outstanding amounts under the Contract including the payments specified in Clause 4.2, and upon confirmation of receipt of such payments from the Operator and/or holders of the sub-accounts as the case may be, close the Escrow Account and pay any amount standing to the credit thereof to the Authority. Upon closure of the Escrow Account hereunder, the Escrow Agreement shall be deemed to be terminated

8 SUPPLEMENTARY ESCROW AGREEMENT

8.1 Supplementary escrow agreement

The Authority and the Operator shall be entitled to enter into a supplementary escrow agreement with the Escrow Bank providing, inter alia, for detailed procedures and documentation for withdrawals from the Escrow Account pursuant to Clause 4.1.1 and for matters not covered under this Agreement such as the restrictions on withdrawals by the Operator or the Authority in the event of breach of this Agreement or upon occurrence of an Escrow Default, procedures relating to operation of the Escrow Account and withdrawal therefrom, reporting requirements and any matters incidental thereto; provided that such supplementary escrow agreement shall not contain any provision which is inconsistent with this Agreement and in the event of any conflict or inconsistency between provisions of this Agreement and such supplementary escrow agreement, the provisions of this Agreement shall prevail.

9 INDEMNITY

9.1 General indemnity

9.1.1 The Concessionaire will indemnify, defend and hold the Authority, Escrow Bank and the Senior Lenders, acting through the Lenders' Representative, harmless against any and all proceedings, actions and Third Party claims for any loss, damage, cost and expense arising out of any breach by the Concessionaire of any of its obligations under this Agreement or on account of failure of the Concessionaire to comply with Applicable Laws and Applicable Permits.

9.1.2 The Operator will indemnify, defend and hold the Authority harmless against any and all proceedings, actions and third party claims for any loss, damage, cost and expense arising out of failure of the Operator to fulfil any of its obligations under this Agreement materially and adversely affecting the performance of the Authority's obligations under the Contract.

9.1.3 The Escrow Bank will indemnify, defend and hold the Authority harmless against any and all proceedings, actions and third party claims for any loss, damage, cost and expense arising out of failure of the Escrow Bank to fulfil its obligations under this Agreement materially and adversely affecting the performance of the Authority's obligations under the Contract other than any loss, damage, cost and expense, arising out of acts done in discharge of their lawful functions by the Escrow Bank, its officers, servants and agents.

9.2 Notice and contest of claims

In the event that any Party hereto receives a claim from a third party in respect of which it is entitled to the benefit of an indemnity under Clause 9.1 or in respect of which it is entitled to reimbursement (the "Indemnified Party"), it shall notify the other Party responsible for indemnifying such claim hereunder (the "Indemnifying Party") within 7 (seven) days of receipt of the claim and shall not settle or pay the claim without the prior approval of the Indemnifying Party, which approval shall not be unreasonably withheld or delayed. In the event that the Indemnifying Party wishes to contest or dispute the claim, it may conduct the proceedings in the name of the Indemnified Party and shall bear all costs involved in contesting the same. The Indemnified Party shall provide all cooperation and assistance in contesting any claim and shall sign all such writings and documents as the Indemnifying Party may reasonably require.

10 DISPUTE RESOLUTION

10.1 Dispute resolution

10.1.1 Any dispute, difference or claim arising out of or in connection with this Agreement, which is not resolved amicably, shall be decided finally by reference to arbitration to a Board of Arbitrators comprising one nominee of each Party to the dispute, and where the number of such nominees is an even number, the nominees shall elect another person to such Board. Such arbitration shall be held in accordance with the Rules of Nani Palkhivala Arbitration Centre, Chennai ("**the Rules**")or such other rules as may be mutually agreed by the Parties, and shall be subject to the provisions of the Arbitration and Conciliation Act, 1996.

10.1.2 The venue of arbitration shall be Chennai and the language of arbitration shall be English.

11 MISCELLANEOUS PROVISIONS

11.1 Governing law and jurisdiction

This Agreement shall be construed and interpreted in accordance with and governed by the laws of India, and the Courts at Chennai shall have jurisdiction over all matters arising out of or relating to this Agreement.

11.2 Waiver of sovereign immunity

The Authority unconditionally and irrevocably:

(a) agrees that the execution, delivery and performance by it of this Agreement constitute commercial acts done and performed for commercial purpose;

(b) agrees that, should any proceedings be brought against it or its assets, property or revenues in any jurisdiction in relation to this Agreement or any transaction contemplated by this Agreement, no immunity (whether by reason of sovereignty or otherwise) from such proceedings shall be claimed by or on behalf of the Authority with respect to its assets;

(c) waives any right of immunity which it or its assets, property or revenues now has, may acquire in the future or which may be attributed to it in any jurisdiction; and

(d) consents generally in respect of the enforcement of any judgement or award against it in any such proceedings to the giving of any relief or the issue of any process in any jurisdiction in connection with such proceedings (including the making, enforcement or execution against it or in respect of any assets, property or revenues whatsoever irrespective of their use or intended use of any order or judgement that may be made or given in connection therewith).

11.3 Priority of agreements

In the event of any conflict between the Contract and this Agreement, the provisions contained in the Contract shall prevail over this Agreement.

11.4 Alteration of terms

All additions, amendments, modifications and variations to this Agreement shall be effectual and binding only if in writing and signed by the duly authorized representatives of the parties

11.5 Waiver

Waiver by any party of a default by another party in the observance and performance of any provisions of or obligations under this Agreement:

(a) Shall not operate or be construed as a waiver of any other or subsequent default hereof or of the provision of or obligations under this Agreement.

(b) Shall not be effective unless it is in writing and executed by a duly authorised representative of the party and

(c) Shall not affect the validity or enforceability of this Agreement in any manner.

11.6 No third-Party beneficiaries

This Agreement is solely for the benefit of the Parties and no other person or entity shall have any rights here und**er,**

11.7 Survival

11.7.1 Termination of this Agreement:

(a) shall not relieve the Parties of any obligations hereunder which expressly or by implication survive termination hereof; and

(b) except as otherwise provided in any provision of this Agreement expressly limiting the liability of either Party, shall not relieve either Party of any obligations or liabilities for loss or damage to the other Party arising out of, or caused by, acts or omissions of such Party prior to the effectiveness of such termination or arising out of such termination.

11.7.2 All obligations surviving the cancellation, expiration or termination of this Agreement shall only survive for a period of 3 (three) years following the date of such termination or expiry of this Agreement.

11.8 Severability

If for any reason whatever any provision of this Agreement is or becomes invalid, illegal or unenforceable or is declared by any court of competent jurisdiction or any other instrumentality to be invalid, illegal or unenforceable, the validity, legality or enforceability of the remaining provisions shall not be affected in any manner, and the Parties will negotiate in good faith with a view to agreeing to one or more provisions which may be substituted for such invalid, unenforceable or illegal provisions, as nearly as is practicable to such invalid, illegal or unenforceable provision. Failure to agree upon any such provisions shall not be subject to Dispute Resolution under Clause 10.1 of this Agreement or otherwise.

11.9 Successors and assigns

This Agreement shall be binding on and shall inure to the benefit of the Parties and their respective successors and permitted assigns.

11.10 Notices

All notices or other communications to be given or made under this Agreement shall be in writing and shall either be delivered personally or sent by courier or registered post with an additional copy to be sent by facsimile or e-mail. The addresses for service of each Party, its facsimile number or e-mail, are set out under its name on the signing pages hereto. A notice shall be effective upon actual receipt thereof, save that where it is received after 5.30 (five thirty) p.m. on a business day, or on a day that is not a business day, the notice shall be deemed to be received on the first business day following the date of actual receipt. Without prejudice to the foregoing, a Party giving or making a notice or communication by facsimile or e-mail shall promptly deliver a copy thereof personally or send it by courier or registered post to the addressee of such notice or communication. It is hereby agreed and acknowledged that any Party may by notice change the address to which such notices and communications to it are to be delivered or mailed. Such change shall be effective when all the Parties have notice of it.

11.11 Language

All notices, certificates, correspondence and proceedings under or in connection with this Agreement shall be in English.

11.12 Authorised representatives

Each of the Parties shall, by notice in writing, designate their respective authorised representatives through whom only all communications shall be made. A Party hereto shall be entitled to remove and/or substitute or make fresh appointment of such authorised representative by similar notice.

11.13 Original Document

This Agreement may be executed in three counterparts, each of which when executed and delivered shall constitute an original of this Agreement

IN WITNESS WHEREOF THE PARTIES HAVE EXECUTED AND DELIVERED THIS

AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN

SIGNED, SEALED AND DELIVERED

For and on behalf of Operator by

(Signature)

(Name)

(Designation)

In the Presence of

1.

2.

AGREED, ACCEPTED AND SIGNED

For and on behalf of Authority by

(Signature)

(Name)

(Designation)

For and on behalf of ESCROW BANK by:

(Signature)

(Name)

(Designation)

For and on behalf of LENDER by:

(Signature)

(Name)

(Designation)

SCHEDULE-N : STAFFING QUALIFICATIONS

(See Clause 5.13)

1. Drivers:

The Operator to ensure that the driver complies with the following conditions:

(a) Must be a holder of a valid driving license in accordance with Applicable Laws for at least 2 years preceding the date of employment; (the Operator to submit copies of the licenses of all such drivers appointed by it to the Authority for its record);

(b) Should possess minimum [eight standard qualifications] and any other educational/ other requirements such as Public Service Vehicle (PSV) badge as prescribed under Applicable Law;

(c) Should possess minimum 2 years' experience of driving heavy transport vehicles in India;

(d) Should not have been blacklisted from operation of a heavy commercial vehicle and or a transport vehicle;

(e) Should not have any pending cases related to fatal accidents or other criminal activities due or have his/her license suspended at any time during the last 3 years preceding Date of Employment; and

(f) Should meet all requirements specified under Applicable Laws including without limitation, the Central Motor Vehicle Rules, 1989.

(g) The male driver should produce a conduct certificate from a police station; women drivers are encouraged to apply.

SCHEDULE-O: VESTING CERTIFICATE

(See Clause 33.5)

1. The (the "**Authority**") refers to the Contract dated*** (the "**Contract**") entered into between the Authority and ..... (the "**Operator**") for (hereinafter called the 'Project').

2. The Authority hereby acknowledges compliance and fulfilment by the Operator of the handback requirements set forth in Article 33 of the Contract on the basis that upon issue of this Vesting Certificate, the Authority shall be deemed to have acquired, and all title and interest of the Operator in or about the Project shall be deemed to have vested unto the Authority, free from any encumbrances, charges and liens whatsoever. Should not have any pending cases related to fatal accidents or traffic fines due or have his/her license suspended at any time during the last

3. Notwithstanding anything to the contrary contained hereinabove, it shall be a condition of this Vesting Certificate that nothing contained herein shall be construed or interpreted as waiving the obligation of the Operator to rectify and remedy any defect or deficiency in any of the handback requirements and/or relieving the Operator in any manner of the same.

Signed this _____ day of _____, 20____ at _____

SIGNED, SEALED AND DELIVERED	AGREED, ACCEPTED AND SIGNED
For and on behalf of Operator by	For and on behalf of Authority by
(Signature)	(Signature)
(Name)	(Name)
(Designation)	(Designation)

In the presence of:

1.

2.

SCHEDULE-P: INTELLIGENT TRANSPORT SYSTEM

(See Clause 19.7)

1. On-Board Devices

In compliance with the obligations set forth in Clause 19.7 of this Agreement, the Operator shall install the on-board devices on each bus in accordance with the specifications listed in Annex 1 of this Schedule–P.

2. ITS- Requirements for Public Transport Vehicle Operations

In compliance with the obligations set forth in Clause 19.7 of this Agreement, the Operator shall install the data monitoring system comprising of all equipment and services listed in Annex 2 of this Schedule– P.

3. Parameters and Data standards

In compliance with the obligations set forth in Clause 19.7 of this Agreement, the Operator shall adhere to the list of standards in Annex 3 of this Schedule-P.

4. Communication between ITS Equipment and ITMS Cloud

In compliance with the obligations set forth in Clause 19.7 of this Agreement, the Operator shall adhere to the communication guidelines specified in Annexure 3 of Schedule AA (Technical specifications).

Annex – 1

On Board Devices

i. The Bidder shall procure buses as defined by the Authority which shall also include various but not limited to ITS System as defined by UBS II, AIS 140 Specifications and any amendments issued thereof. Some of the equipment's and their quantities are listed below:

Sr. No	Type of Equipment	(Qty)	Remarks
1	Passenger Display Boards	4	
2	Speaker	2	
3	Amplifier	1	
4	Single Control Unit (SCU) / On Board Unit (OBU)	1	
5	Driver Display Unit (DDU)	1	
6	CCTV with MDVR	7 (6+1 reverse camera)	Internal and External with minimum 30 days backup storage
7	Panic Button	Each row of the Seat	As per AIS 140 Specifications
8	Camera based Automatic Passenger Counters (APC)	2	At each door

ii. The ITS equipment installed in the buses should provide location accuracy up to 5 meters.

iii. The equipment of the ITS shall be integrated to each other and the CAN Bus for transmitting all the bus data, vehicle tracking data and any other data as required by the Authority. The Cost of such integration should be the responsibility of the Operator.

iv. The Authority shall provide all the information related to route and Passenger Information System (PIS) to the Operator.

v. The camera based passenger counter shall be integrated to the ITS at the time of prototype approval, or delivery of the bus or as a date mutually agreed with the Authority.

vi. Security Camera Network (CCTVs) and display screen should meet the specification for IP based cameras and mNVR as per Detailed specification document for CCTV devices as per UBS II and AIS 153, 16833:2018 CCTV system with integrated emergency System (with minimum 2-megapixel camera, SSD hard disc, 4G/5G, Wifi for data transfer).

vii. Rear View Camera System to display the zone behind the vehicle shall be provided along with display on or near dash board. The Reverse Parking Alert System (RPAS) shall comply with provisions of AIS 145. The indirect vision system shall get activated upon engagement of reverse gear. RPAS should give audio warning on reaching the critical distance available for reverse parking.

viii. ITS shall send data directly to Centralized ITMS server as per the

communication protocol, data standard and message Architecture provided in Clause 3

ix. Data from OEM server can also be accessed by Centralized ITMS server through API Integration as and when needed.

Annex – 2

ITS- Requirements for Public Transport Vehicle Operations

i. The bidder shall procure buses in compliance with AIS-140: Intelligent Transportation Systems (ITS) — Requirements for Public Transport vehicle operation and set up data monitoring systems for on board ITS: Vehicle Location Tracking, Camera Surveillance System and Emergency Request Button. The bidder shall set up systems for monitoring operations and managing incidents.

ii. The bidder shall share real time data from on-board devices using standard communications protocols defined by AIS 140 with the Authority. The bidder shall give the Authority access to real time raw data feed from buses and support the Authority in integrating feed from the buses procured under the concession to centralized Intelligent Transit Management Systems (ITMS) to ensure monitoring of services and KPIs set out under Article 20 of the Agreement.

Annex - 3
List of parameters and data standard

The bidder shall share vehicle health monitoring and diagnostics (VHMD) parameters through the bus CAN data on a real time basis with the Authority. The list of CAN data parameters shall be shared over and above the vehicle location data through the on-board telematics system.

Electric bus (eBus) performance and safety are directly linked with the battery performance. The usage of eBus battery under sub-optimal conditions can directly influence the performance as well as life of the battery. Analysis of the impact of different stress factors (Battery temperature, C-rate, DOD, and SOC) on the battery can help in getting more insights into the degradation mechanism and battery aging (i.e. Calendar and Cyclic aging). Monitoring and analysis of some of the battery parameters during eBus operation is important to ensure optimal battery life and eBus performance along with a high level of safety. As the Battery Management System (BMS) of the eBus battery monitors all the critical parameters of the battery during eBus operation, the availability of these data with the Authority will help in better planning of eBus operation and charging strategies and ensure safety of operations. The following CAN parameters should be integrated to the on board IoT device/ITS and capable of transmitting data at a frequency of 30 sec to the centralized ITMS server.

1.	Timestamp
2.	Odometer reading
3.	Vehicle Status
4.	SoC (State of Charge)
5.	SoH (State of Health)
6.	Speed
7.	Acceleration
8.	Voltage (pack and cell level)
9.	Current (pack and cell level)
10.	Power
11.	Charger Current
12.	Charger Voltage
13.	Ambient temperature
14.	Battery Cell temperature
15.	Motor temperature
16.	BMS error
17.	Coolant Temperature

The Operator shall provide for communication of additional parameters (if any) as per the requirement of the ITMS platform.

SCHEDULE-Q : SUBSTITUTION AGREEMENT

(See Clause 35.4)

THIS SUBSTITUTION AGREEMENT is entered into on this the ..... day of 20….

AMONGST

1 The _____, represented by [• and having its principal offices at *****] (hereinafter referred to as the "**Authority**" which expression shall unless repugnant to the context or meaning thereof include its administrators, successors and assigns);

2 [Limited], a company incorporated under the provisions of the Companies Act, 2013 and having its registered office at , (hereinafter referred to as the "**Operator**" which expression shall unless repugnant to the context or meaning thereof include its successors and permitted assigns and substitutes); AND

3 (name and particulars of Lenders' Representative) and having its registered office at,acting for and on behalf of the Senior Lenders as their duly authorised agent with regard to matters arising out of or in relation to this Agreement (hereinafter referred to as the "**Lenders' Representative**", which expression shall unless repugnant to the context or meaning thereof include its successors and substitutes).

WHEREAS:

(A) The Authority has entered into a Supply cum Operation and Maintenance Agreement dated .....with the Operator (the "**Concession Agreement**") for procurement, supply, operation and maintenance of _____ Double Decker Air-Conditioned electric buses and development of allied electric and civil infrastructure on gross cost contracting and a copy of which is annexed hereto and marked as Annex-A to form part of this Agreement.

(B) Senior Lenders have agreed to finance the Project in accordance with the terms and conditions set forth in the Financing Agreements.

(C) Senior Lenders have requested the Authority to enter into this Substitution Agreement for securing their interests through assignment, transfer and substitution of the Contract to a Nominated Company in accordance with the provisions of this Agreement and the Concession Agreement.

(D) In order to enable implementation of the Project including its financing, construction, operation and maintenance, the Authority has agreed and undertaken to transfer and assign the Contract to a Nominated Company in accordance with the terms and conditions set forth in this Agreement and the Concession Agreement.

NOW, THEREFORE, in consideration of the foregoing and the respective covenants and agreements set forth in this Agreement, the receipt and sufficiency of which is hereby acknowledged, and intending to be legally bound hereby, the Parties agree as follows:

1 DEFINITIONS AND INTERPRETATION

1.1 Definitions

In this Substitution Agreement, the following words and expressions shall, unless repugnant to the context or meaning thereof, have the meaning hereinafter respectively assigned to them:

"**Agreement**" means this Substitution Agreement and any amendment thereto made in accordance with the provisions contained in this Agreement;

"**Financial Default**" means occurrence of a material breach of the terms and conditions of the Financing Agreements or a continuous default in Debt Service by the Operator for a minimum period of 3 (three) months;

"**Lenders' Representative**" means the person referred to as the Lenders' Representative in the foregoing Recitals;

"**Nominated Company**" means a company, incorporated under the provisions of the Companies Act, 1956, or the Companies Act, 2013, as the case may be, selected by the Lenders' Representative, on behalf of Senior Lenders, and proposed to the Authority for assignment/transfer of the Contract as provided in this Agreement;

"**Notice of Financial Default**" shall have the meaning ascribed thereto in Clause 3.2.1; and

"**Parties**" means the parties to this Agreement collectively and "**Party**" shall mean any of the Parties to this Agreement individually.

1.2 Interpretation

1.2.1 References to Lenders' Representative shall, unless repugnant to the context or meaning thereof, mean references to the Lenders' Representative, acting for and on behalf of Senior Lenders.

1.2.2 References to Clauses are, unless stated otherwise, references to Clauses of this Agreement.

1.2.3 The words and expressions beginning with capital letters and defined in this Agreement shall have the meaning ascribed thereto herein, and the words and expressions used in this Agreement and not defined herein but defined in the Concession Agreement shall, unless repugnant to the context, have the meaning ascribed thereto in the Concession Agreement.

1.2.4 The rules of interpretation stated in Clauses 1.2, 1.3 and 1.4 of the Concession Agreement shall apply, *mutatis mutandis*, to this Agreement.

2 ASSIGNMENT

2.1 Assignment of rights and title

The Operator hereby agrees to assign the rights, title and interest in the Contract to, and in favour of,the Lenders' Representative pursuant to and in accordance with the provisions of this Agreement and the Concession Agreement by way of security in respect of financing by the Senior Lenders under the Financing Agreements.

3 SUBSTITUTION OF THE OPERATOR

3.1 Rights of substitution

3.1.1 Pursuant to the rights, title and interest assigned under Clause 2.1, the Lenders' Representative shall be entitled to substitute the Operator by a Nominated Company under and in accordance with the provisions of this Agreement and the Concession Agreement.

3.1.2 The Authority hereby agrees to substitute the Operator by endorsement on the Concession Agreement in favour of the Nominated Company selected by the Lenders' Representative in accordance with this Agreement. (For the avoidance of doubt, the Senior Lenders or the Lenders' Representative shall not be entitled to operate and maintain the Project as Operator either individually or collectively).

3.2 Substitution upon occurrence of Financial Default

3.2.1 Upon occurrence of a Financial Default, the Lenders' Representative may issue a notice to the Operator (the "Notice of Financial Default") along with particulars thereof and send a copy to the Authority for its information and record. A Notice of Financial Default under this Clause 3 shall be conclusive evidence of such Financial Default and it shall be final and binding upon the Operator for the purposes of this Agreement.

3.2.2 Upon issue of a Notice of Financial Default hereunder, the Lenders' Representative may, without prejudice to any of its rights or remedies under this Agreement or the Financing Agreements, substitute the Operator by a Nominated Company in accordance with the provisions of this Agreement.

3.2.3 At any time after the Lenders' Representative has issued a Notice of Financial Default, it may by notice require the Authority to suspend all the rights of the Operator and undertake the operation and maintenance of the Project in accordance with the provisions of Article 16 and 17 of the Concession Agreement, and upon receipt of such notice, the Authority shall undertake

Suspension under and in accordance with the provisions of the Concession Agreement. The aforesaid Suspension shall be revoked upon substitution of the Operator by a Nominated Company, and in the event such substitution is not completed within 180 (one hundred and eighty) days from the date of such Suspension, the Authority may terminate the Concession Agreement forthwith by issuing a Termination Notice in accordance with the provisions of the Concession Agreement; provided that upon written request from the Lenders' Representative and the Operator, the Authority may extend the aforesaid period of 180 (one hundred and eighty) days by a period not exceeding 90 (ninety) days. For the avoidance of doubt, the Authority expressly agrees and undertakes to terminate the Concession Agreement forthwith, upon receipt of a written request from the Lenders' Representative at any time after 240 (two hundred and forty) days from the date of Suspension hereunder.

3.3 Substitution upon occurrence of Operator Default

3.3.1 Upon occurrence of an Operator Default, the Authority shall by a notice inform the Lenders' Representative of its intention to issue a Termination Notice and grant 15 (fifteen) days time to the Lenders' Representative to make a representation, stating the intention to substitute the Operator by a Nominated Company.

3.3.2 In the event that the Lenders' Representative makes a representation to the Authority within the period of 15 (fifteen) days specified in Clause 3.3.1, stating that it intends to substitute the Operator by a Nominated Company, the Lenders' Representative shall be entitled to undertake and complete the substitution of the Operator by a Nominated Company in accordance with the provisions of this Agreement within a period of 180 (one hundred and eighty) days from the date of such representation, and the Authority shall either withhold Termination or undertake Suspension for the aforesaid period of 180 (one hundred and eighty) days; provided that upon written request from the Lenders' Representative and the Operator, the Authority shall extend the aforesaid period of 180 (one hundred and eighty) days by a period not exceeding 90 (ninety) days.

3.4 Procedure for substitution

3.4.1 The Authority and the Operator hereby agree that on or after the date of Notice of Financial Default or the date of representation to the Authority under Clause 3.3.2, as the case may be, the Lenders' Representative may, without prejudice to any of the other rights or remedies of the Senior Lenders, invite, negotiate and procure offers, either by private negotiations or public auction or tenders for the take over and transfer of the Project including the Contract to the Nominated Company upon such Nominated Company's assumption of the liabilities and obligations of the Operator towards the Authority under the Concession Agreement and towards the Senior Lenders under the Financing Agreements.

3.4.2 To be eligible for substitution in place of the Operator, the Nominated Company shall be required to fulfil the eligibility criteria that were laid down by the Authority for shortlisting the bidders for award of the Contract; provided that the Lenders' Representative may represent to the Authority that all or any of such criteria may be waived in the interest of the Project, and if the Authority determines that such waiver shall not have any material adverse effect on the Project, it may waive all or any of such eligibility criteria.

3.4.3 Upon selection of a Nominated Company, the Lenders' Representative shall request the

Authority to:

(a) accede to transfer to the Nominated Company the right to construct, operate and maintain the Project in accordance with the provisions of the Concession Agreement;

(b) endorse and transfer the Contract to the Nominated Company, on the same terms and conditions, for the residual Concession Period; and

(c) enter into a Substitution Agreement with the Lenders' Representative and the Nominated Company on the same terms as are contained in this Agreement.

3.4.4 If the Authority has any objection to the transfer of Contract in favour of the Nominated Company in accordance with this Agreement, it shall within 15 (fifteen) days from the date of proposal made by the Lenders' Representative, give a reasoned order after hearing the Lenders' Representative. If no such objection is raised by the Authority, the Nominated Company shall be deemed to have been accepted. The Authority thereupon shall transfer and endorse the Contract within 15 (fifteen) days of its acceptance/deemed acceptance of the Nominated Company; provided that in the event of such objection by the Authority, the Lenders' Representative may propose another Nominated Company whereupon the procedure set forth in this Clause 3.4 shall be followed for substitution of such Nominated Company in place of the Operator.

3.5 Selection to be binding

The decision of the Lenders' Representative and the Authority in selection of the Nominated Company shall be final and binding on the Operator. The Operator irrevocably agrees and waives any right to challenge the actions of the Lenders' Representative or the Senior Lenders or the Authority taken pursuant to this Agreement including the transfer/assignment of the Contract in favour of the Nominated Company. The Operator agrees and confirms that it shall not have any right to seek revaluation of assets of the Project or the Operator's shares. It is hereby acknowledged by the Parties that the rights of the Lenders' Representative are irrevocable and shall not be contested in any proceedings before any court or Authority and the Operator shall have no right or remedy to prevent, obstruct or restrain the Authority or the Lenders' Representative from effecting or causing the transfer by substitution and endorsement of the Contract as requested by the Lenders' Representative.

4 PROJECT AGREEMENTS

4.1 Substitution of Nominated Company in Project Agreements

The Operator shall ensure and procure that each Project Agreement contains provisions that entitle the Nominated Company to step into such Project Agreement, in its discretion, in place and substitution of the Operator in the event of such Nominated Company's assumption of the liabilities and obligations of the Operator under the Concession Agreement.

5 TERMINATION OF CONCESSION AGREEMENT

5.1 Termination upon occurrence of Financial Default

At any time after issue of a Notice of Financial Default, the Lenders' Representative may by a notice in writing require the Authority to terminate the Concession Agreement forthwith, and upon receipt of such notice, the Authority shall undertake Termination under and in accordance with the provisions of Article 32 of the Concession Agreement.

5.2 Termination when no Nominated Company is selected

In the event that no Nominated Company accept,le to the Authority is selected and recommended by the Lenders' Representative within the period of 180 (one hundred and eighty) days or any extension thereof as set forth in Clause 3.3.2, the Authority may terminate the Concession Agreement forthwith in accordance with the provisions thereof.

5.3 Realization of Debt Due

The Authority and the Operator hereby acknowledge and agree that, without prejudice to their any other right or remedy, the Lenders' Representative is entitled to receive from the Operator, without any further reference to or consent of the Operator, the Debt Due upon Termination of the Concession Agreement. For realisation of the Debt Due, the Lenders' Representative shall be entitled to make its claim from the Escrow Account in accordance with the provisions of the Concession Agreement and the Escrow Agreement.

6 DURATION OF THE AGREEMENT

6.1 Duration of the Agreement

This Agreement shall come into force from the date hereof and shall expire at the earliest to occur of the following events:

(a) Termination of the Agreement; or

(b) no sum remains to be advanced and no sum is outstanding to the Senior Lenders, under the Financing Agreements.

7 INDEMNITY

7.1 General indemnity

7.1.1 The Operator will indemnify, defend and hold the Authority and the Lenders' Representative harmless against any and all proceedings, actions and third party claims for any loss, damage, cost and expense of whatever kind and nature arising out of any breach by the Operator of any of its obligations under this Agreement or on account of failure of the Operator to comply with Applicable Laws and Applicable Permits.

7.1.2 The Authority will indemnify, defend and hold the Operator harmless against any and all proceedings, actions and third party claims for any loss, damage, cost and expense arising out of failure of the Authority to fulfil any of its obligations under this Agreement, materially and adversely affecting the performance of the Operator's obligations under the Concession Agreement or this Agreement, other than any loss, damage, cost and expense, arising out of acts done in discharge of their lawful functions by the Authority, its officers, servants and agents.

7.1.3 The Lenders' Representative will indemnify, defend and hold the Operator harmless against any and all proceedings, actions and third party claims for any loss, damage, cost and expense arising out of failure of the Lenders' Representative to fulfil its obligations under this Agreement, materially and adversely affecting the performance of the Operator's obligations under the Concession Agreement, other than any loss, damage, cost and expense, arising out of acts done in discharge of their lawful functions by the Lenders' Representative, its officers, servants and agents.

7.2 Notice and contest of claims

In the event that any Party hereto receives a claim from a third party in respect of which it is entitled to the benefit of an indemnity under Clause 7.1 or in respect of which it is entitled to reimbursement (the "**Indemnified Party**"), it shall notify the other Party responsible for indemnifying such claim hereunder (the "**Indemnifying Party**") within 15 (fifteen) days of receipt of the claim and shall not settle or pay the claim without the prior approval of the Indemnifying Party, such approval not to

be unreasonably withheld or delayed. In the event that the Indemnifying Party wishes to contest or dispute the claim, it may conduct the proceedings in the name of the Indemnified Party and shall bear all costs involved in contesting the same. The Indemnified Party shall provide all cooperation and assistance in contesting any claim and shall sign all such writings and documents as the Indemnifying Party may reasonably require.

8 DISPUTE RESOLUTION

8.1 Dispute resolution

8.1.1 Any dispute, difference or claim arising out of or in connection with this Agreement which is not resolved amicably shall be decided by reference to arbitration to a Board of Arbitrators comprising one nominee each of the Authority, Operator and the Lenders' Representative. Such arbitration shall be held in accordance with the Rules of Nani Palkhivala Arbitration Centre, Chennai (the "**Rules**") or such other rules as may be mutually agreed by the Parties, and shall be subject to provisions of the Arbitration and Conciliation Act, 1996.

8.1.2 The Arbitrators shall issue a reasoned award and such award shall be final and binding on the Parties. The venue of arbitration shall be *** and the language of arbitration shall be English.

9 MISCELLANEOUS PROVISIONS

9.1 Governing law and jurisdiction

This Agreement shall be construed and interpreted in accordance with and governed by the laws of India, and the Courts at *** shall have jurisdiction over all matters arising out of or relating to this Agreement.

9.2 Waiver of sovereign immunity

The Authority unconditionally and irrevocably:

(a) agrees that the execution, delivery and performance by it of this Agreement constitute commercial acts done and performed for commercial purpose;

(b) agrees that, should any proceedings be brought against it or its assets, property or revenues in any jurisdiction in relation to this Agreement or any transaction contemplated by this Agreement, no immunity (whether by reason of sovereignty or otherwise) from such proceedings shall be claimed by or on behalf of the Authority with respect to its assets;

(c) waives any right of immunity which it or its assets, property or revenues now has, may acquire in the future or which may be attributed to it in any jurisdiction; and

(d) consents generally in respect of the enforcement of any judgement or award against it in any such proceedings to the giving of any relief or the issue of any process in any jurisdiction in connection with such proceedings (including the making, enforcement or execution against it or in respect of any assets, property or revenues whatsoever irrespective of their use or intended use of any order or judgement that may be made or given in connection therewith).

9.3 Priority of agreements

In the event of any conflict between the Concession Agreement and this Agreement, the provisions contained in the Concession Agreement shall prevail over this Agreement.

9.4 Alteration of terms

All additions, amendments, modifications and variations to this Agreement shall be effectual and binding only if in writing and signed by the duly authorised representatives of the Parties.

9.5 Waiver

9.5.1 Waiver by any Party of a default by another Party in the observance and performance of any provision of or obligations under this Agreement:

(a) shall not operate or be construed as a waiver of any other or subsequent default hereof or of other provisions of or obligations under this Agreement;

(b) shall not be effective unless it is in writing and executed by a duly authorised representative of the Party; and

(c) shall not affect the validity or enforceability of this Agreement in any manner.

9.5.2 Neither the failure by either Party to insist on any occasion upon the performance of the terms, conditions and provisions of this Agreement or any obligation thereunder nor time or other indulgence granted by a Party to another Party shall be treated or deemed as waiver of such breach or acceptance of any variation or the relinquishment of any such right hereunder.

9.6 No third party beneficiaries

This Agreement is solely for the benefit of the Parties and no other person or entity shall have any rights hereunder.

9.7 Survival

9.7.1 Termination of this Agreement:

(a) shall not relieve the Parties of any obligations hereunder which expressly or by implication survive termination hereof; and

(b) except as otherwise provided in any provision of this Agreement expressly limiting the liability of either Party, shall not relieve either Party of any obligations or liabilities for loss or damage to the other Party arising out of or caused by acts or omissions of such Party prior to the effectiveness of such termination or arising out of such termination.

9.7.2 All obligations surviving the cancellation, expiration or termination of this Agreement shall only survive for a period of 3 (three) years following the date of such termination or expiry of this Agreement.

9.8 Severability

If for any reason whatever any provision of this Agreement is or becomes invalid, illegal or unenforceable or is declared by any court of competent jurisdiction or any other instrumentality to be invalid, illegal or unenforceable, the validity, legality or enforceability of the remaining provisions shall not be affected in any manner, and the Parties will negotiate in good faith with a view to agreeing to one or more provisions which may be substituted for such invalid, unenforceable or illegal provisions, as nearly as is practicable to such invalid, illegal or unenforceable provision.

Failure to agree upon any such provisions shall not be subject to Dispute Resolution under Clause 8 of this Agreement or otherwise.

9.9 Successors and assigns

This Agreement shall be binding on and shall inure to the benefit of the Parties and their respective successors and permitted assigns.

9.10 Notices

All notices or other communications to be given or made under this Agreement shall be in writing, shall either be delivered personally or sent by courier or registered post with an additional copy to be sent by facsimile or e-mail. The address for service of each Party, its facsimile number and e-

mail address are set out under its name on the signing pages hereto. A notice shall be effective upon actual receipt thereof, save that where it is received after 5.30 (five thirty) p.m. on any day, or on a day that is a public holiday, the notice shall be deemed to be received on the first working day following the date of actual receipt. Without prejudice to the foregoing, a Party giving or making a notice or communication by facsimile or e-mail shall promptly deliver a copy thereof personally or send it bycourier or registered post to the addressee of such notice or communication. It is hereby agreed and acknowledged that any Party may by notice change the address to which such notices and communications to it are to be delivered or mailed. Such change shall be effective when all the Parties have notice of it.

9.11 Language

All notices, certificates, correspondence and proceedings under or in connection with this Agreement shall be in English.

9.12 Authorised representatives

Each of the Parties shall by notice in writing designate their respective authorised representatives through whom only all communications shall be made. A Party hereto shall be entitled to remove and/or substitute or make fresh appointment of such authorised representative by similar notice.

9.13 Original Document

This Agreement may be executed in three counterparts, each of which when executed and delivered shall constitute an original of this Agreement.

IN WITNESS WHEREOF THE PARTIES HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN.

THE COMMON SEAL OF OPERATOR has been affixed pursuant to the resolution passed by the Board of Directors of the Operator at its meeting held on the …… day of 20…… hereunto affixed in the presence of ……, Director, who has signed these presents in token thereof and ……, Company Secretary / Authorised Officer who has countersigned the same in token thereof [$]:	SIGNED, SEALED A ND DELIVERED For and on behalf of AUTHORITY by: (Signature) (Name) (Designation) (Address) (e-mail address)

SIGNED, SEALED AND DELIVERED
For and on behalf of
SENIOR LENDERS by the Lenders' Representative:
(Signature)
(Name)
(Designation)
(Address)
(e-mail address)

In the presence of:
1.

2.

[$] To be affixed in accordance with the articles of association of the Operator.

SCHEDULE-R : STATEMENT OF VARIATION IN ELECTRICITY COST (ANNUAL)

(See Clause 22.5)

Period		
A	**Total Bus Kilometers operated during the period (kms)**	
B	**Electricity Units consumed for Buses Charging Infrastructure under the Project (kWh)**	
C	**Allowed Energy Consumption for Bus Charging = [A x Specific Energy consumption] (kWh)**	
D	**Minimum of the B and C (kWh)**	
E	**Current Tariff approved by State Electricity Regulatory Commission for the period (including taxes, cess, duties etc.) (Rs./kWh)**	
G	**Tariff included in the PK Fee (Rs./kWh)**	
H	**Electricity input cost reimbursable by Authority [D x (E – G)] (INR)**	

In case Opportunity Charging takes place outside the Maintenance Depot, then include the units consumed and amount paid for the same at respective places above.

Name & Designation of the Authorised Signatory:

Date of Submission: _

SCHEDULE-S : OPERATIONAL INFRACTIONS

(See Clause 20.8)

A. Lost Kilometers

For any missed Trip or Trip not completed, deductions shall be made in the following manner:

Sr. No.	Extent to which a Trip is missed	Deductions
1	A Trip, which either does not commence or does not complete even 25% of the kilometers for the Trip.	100% of the payment payable for the trip will be applied as performance deductions for the round trip. In addition, payment for the lost kilometers of the round trip, shall not be payable.
2	A Trip, which has completed more than 25% but less than 60% of the kilometers for the Trip.	75% of the payment payable for the kilometres for the trip will be applied as performance deductions for the round trip. In addition, payment for the lost kilometers of the round trip, shall not be payable.
3	A Trip, which has completed more than 60% but has not completed 100% kilometers for the Trip.	50% of the payment payable for the kilometres of the trip will be applied as performance deductions for the round trip. In addition, payment for the lost kilometers of the round trip, shall not be payable.

"LOST KILOMETERAGE CLASSIFICATION & CAUSES – DEDUCTIBLE AND NON-DEDUCTIBLE

1. Staff (Deductible)

   In service kilometres not operated due to Operator staff causes may include (but is not limited to):

   a) Insufficient staff to cover the service including shortage, sickness or absence, industrial action etc.
   b) Sickness on duty (part loss).
   c) Suspension of driver (with-out replacement).

2. Mechanical (Deductible)

   In service kilometers not operated due to mechanical causes may include (but is not limited to):

   a) Insufficient buses to cover the service.
   b) Non-serviceable bus.
   c) Breakdowns en-route.

3. Data Unavailability (Deductible)

   In case desired operational data and vehicle health monitoring data is not shared as per the requirement specified in the table below:

Table: Parameters for Vehicle Health Monitoring:

Sr No	Parameter	Data Type	Units	Frequency
1	Odometer reading (instrument	Numeric	Km	

	cluster/CAN)			
2	Vehicle Status	text		
3	Traction Battery Data (As per AIS 038, revision 2, amendment 3)			
a	Battery SoC (State of Charge) (& Method used for SoC Estimation to be shared at time of delivery of lot)	Numeric	Percent	
b	Battery Voltage	Numeric	Volts	
c	Battery Current	Numeric	Amperes	
d	Battery Temperature	Numeric	degree Celsius	
e	Depth of discharge (DoD)	Numeric	Percent	
f	SoH (State of Health) Estimate (Algorithm Used to estimate SoH to be shared at time of delivery of lot)	Numeric	Percent	
g	Energy generated via Regenerative Braking			
4	Ambient temperature	Numeric	degree Celsius	
5	Vehicle Speed	Numeric	Kmph	
6	Acceleration Data	Numeric	m/s2	
7	Braking Data	Numeric	m/s2	
8	Charging Status (it can be pushed viaBMS)	text		
a	Charging Start Time			
b	Charging End Time			
c	Charging Power	Numeric	KW	
d	Charging Current	Numeric	Amperes	
e	Charging Voltage	Numeric	Volts	
9	Cell/Pack temperature	Numeric	degree Celsius	
10	Motor Current and Voltage	Numeric	degree Celsius	
a	Motor Current and Voltage while			
	motoring			
b	Motor Current and Voltage while braking			
11	BMS error/charging fault	Text		
12	Health status of PIS	Text		
13	Heath Status of BMS			
14	Heath Status of ITS			
15	Heath Status of VTS			
16	Door open/ closed status	text		
a	Driver Side			
b	Passenger Side			
c	Rear Left			
d	Rear Right			
17	Cabin temperature	Numeric	degree Celsius	

18	Motor Speed	Numeric	rpm	
19	Diagonostic Trouble Codes	Code - Alphanumeric Description - Text		
20	Charge Discharge Cycle	Numeric		
21	Distance to empty/residual range			

Data availability for every fleet below 98% (ninety eight percent) in any month 1% (one percent) of the Monthly Fees shall be deducted. This infraction will be considered in un- capped category.

4. Other Deductibles

In service kilometers not operated due to something over which the Operator has an element of control but which is not covered by staff or mechanical causes may include (but is not limited to):

a) Staff error or unauthorized curtailments by staff.
b) A bus blocked in the garage and unable to depart on time.
c) A bus running got discharged en-route.
d) Where a bus in service has to be withdrawn due to a defective PIS / GPS.
e) Where the reason for the lost Kilometers is unknown or is in doubt.

5. Traffic (Non-Deductibles)

a) In service kilometers not operated due to traffic causes may include (but is not limited to) Curtailments or lost journeys arising from the effect of traffic congestion whatever the cause.
b) Losses arising from conductor (MTC staff) being late in reaching changeover points must not be included.
c) Losses arising from road traffic accidents involving the Operator's vehicle, when there is no fault of operator's driver.

6. Other Non-Deductibles

In service kilometers not operated due to something beyond the Operator's reasonable control but which is not covered by traffic causes may include (but is not limited to):

a) Incidents

Any kilometers losses resulting from incidents reportable to MTC.

In case of strike / Bandh if bus and driver are available for duty but bus could not be operated.

Non-deductible losses apply only to the day the incident occurred and should not exceed the remainder of the duty in question unless exceptional circumstances are explained. For road traffic accidents or vandalism whilst in service it must be demonstrated that action was taken as quickly as possible to render the vehicle(s) fit for service. Evidence must be readily available to show the number of vehicles affected, incident times, the extent of the damage, engineers action etc.

b) Disasters

Where a major occurrence requires a fundamental change to the planned operation, for example accidents or explosions. Losses arising from traffic congestion caused by these events will be classified as non deductible.

c) Road Closed/Blocked

Where vehicles are 'turned back' or prevented from completing part of the route, for example security alerts, floods, diversions or roads blocked.

Losses arising from traffic congestion caused by these events should be classified as non deductible.

Other Infractions

An Incidence of sub-optimal performance and/or non-compliance of Specifications and standards shall be referred to as an "Infraction". The deduction for each Infraction shall be made in terms of the table set out below.

Infraction:

An Incidence of sub-optimal performance and/or non-compliance of Specifications and standards shall be referred to as an "Infraction".

The deduction for each Infraction shall be made in terms of the table set out below:

Sr. No.	Category of Infraction	Reference Table for Infraction In Annexure	Amount for Each Infraction for calculating Performance Claim/ Deduction (in Rupees)	Time to Resolve for next higher slab in terms of Clause …of this Schedule (Bus related infraction)
1	A	Table A	100/-	One day
2	B	Table B	500/-	Two days
3	C	Table C	1,000/-	Three Days
4	D	Table D	1,500/-	Three Days
5	E	Table E	3,000/-	One day
6	F	Table F	10,000/-	One day
7	G	Table G	50,000/- + Actual expenses to be borne by the operator.	One day
8	H	Table H		

Note:

a. Performance Deduction/Claim amount shall be applied even during time to resolve the infraction (Period indicated as in above table). Infractions can be identified by MTC, a nominated person, on visual checking, electro-mechanical reviews, reports from MTC/passenger feedback and data from the data base of MTC.
b. MTC shall have access to Operator's facilities in order to check such Infractions on a regular basis either through visits to the workshops and garages commonly used by the Operator, or bus inspections at terminal points along the route during service hours.
c. The Operator may note that the formats provided in category wise Infractions given in tables A, B, C, D, E, F, and G are typical, but are subject to revision from time to time based on actual information, logistics and monitoring requirements.
d. In case of non-rectification of infraction within stipulated time to resolve, any subsequent repetition shall attract penalty of next higher slab with a ceiling of Rs. 3,000 per infraction, for category A, B, C, D & E. Thereafter, it will be binding on the Operator not to operate the vehicle till rectification of the bus related to infractions.
e. Total infractions of all buses, mentioned in tables A, B, C, D except Safety items shall be capped to 5 % of the total monthly due payments.
f. All other infractions (of Safety category) mentioned in tables A, B, C and D & all infractions mention in tables E, F, and G shall be non-capped.
g. The fine and penalties for Traffic offences shall be paid by the operator to Traffic police / RTO and any other authority within stipulated period.
h. If ITS equipment found switched off or not operated, then payment for that trip will not made.

CATEGORY WISE LIST OF INFRACTION

Table A : Category "A" Infraction

Sr. no.	Description of the infraction
	Safety
1	Damaged/Missing window safety guard rails.
2	Loose electrical wiring/ tampering with electrical wiring harness.

Sr. no.	Description of the infraction
3	Lack of specified fire extinguishers, empty or partially empty fire extinguishers that are beyond the date of expiry, or do not specify the expiry date.
4	Damaged floor, steps, hatches, or hatch covers inside the bus.
5	Missing damaged, or loosely hanging rub rails, hand grab rails, and hand holds.
6	Missing, broken, or loosely hanging, seat belts if provided
7	LED board defective (per board)
8	Missing/ non operative, or blackened saloon lights, indicator lights, wiper system, wiper blades, prescribed horn and any indicating instruments (per item)
9	Fixing any additional lights, gadgets, guards, fixtures, etc. on the exterior of the bus in contravention to the Applicable Laws.
10	Fitment of radio, music system, or any other gadgets inside the bus in contravention to the Applicable Laws.
Operations	
11	Not stopping at authorized bus stops on the Route
12	Delaying operation of Stage Carriage Services without cause.
13	Parking vehicles in stations against permitted rules and regulations.
14	Driver smoking, chewing tobacco, betel leaf while on board the bus
15	Picking and dropping passengers at unauthorized bus stops, if no conductor provided by MTC
16	Late out of bus more than 15 minutes at the time of turn out.
Quality	
17	To operate vehicle with visible dents, damaged / torn external panels that are more than 6” in width.
18	Oil spillage on wheel rims, hubs, tyres, etc
19	Discoloration or unpainted repair work inside the bus or on any of its items
20	Not maintaining USB charging ports in operating condition

Table B: Category “B” Infraction

Sr. no.	Description of the infraction
Safety	
1	To operate with defective front, side and/or back brake lights
2	Section of handrail loose or with sharp edges
3	Inadequate operation of passenger access doors, either due to damage or incorrect operation which affects the boarding and alighting of passengers
4	Defective, emergency exits and hatches or damaged or bent bumpers
Operations	
5	Parking Stage Carriage Buses in places other than those prescribed by MTC
6	Deviating from the route of a service without the prior authorization or instruction of MTC/ Police without due cause
7	Roof leakage , Surveillance system not working/ recording, CCTV defect
8	Vehicle Tracking System defect
Quality	
9	Dirty vehicle, outside or inside, at the beginning of the journey
10	Damaged, broken, loosely fitted, or missing passenger seats, windows Rattling

Sr. no.	Description of the infraction
11	Display of incorrect passenger route information, inadequately lit or illegible display of passenger information at any of designated locations for displaying passenger information on the bus
12	Display of slogans, posters on the bus without prior approval of MTC.
13	Running the bus with a lux level less than 70 in the saloon area

Table C: Category "C" Infraction

Sr. no.	Description of the infraction
	Safety
1	To reduce the percentage of visual transmission of lights of safety glasses beyond normal as prescribed in Rule 100(2) of CMVR
2	To drive with lights off in the saloon area and/or destination boards after lighting uptime
3	Use of unauthorized electronic equipment by the driver while driving (Cell Phones, Walkman etc.)
4	Causing minor road accidents
5	Violation of any of the legal requirements related to registration, operation and maintenance of the buses
6	Fitment of an Air Pressure Horn
7	Driving the bus in a defective condition, getting battery discharged out
	Operations
8	Operating unauthorized trips such as trips which do not form part of the Schedule
9	Tampering On-board Equipment
10	Driver quarrelling with passenger(s) or road users or otherwise misbehavior with passengers or other road users.
11	Operational staff working beyond authorized working hours permitted under Applicable Laws. (Unless situation demands)
12	Breakdown / accidents- If the loss of kilometers is more than 5% of schedule kilometers of that bus on that day.
13	Air conditioning system defective en-route (AC buses)
	Quality
14	To use or modified colors and designs of the external paintwork of the vehicle outside the standards parameters as notified by Transport Division,
	MTC.
15	To place advertising material not authorized by MTC or to infringe regulations regarding advertising material in vehicles.
16	Failure to refurbish the bus after sixth year from date of put in service, per bus per day.
17	Failure to comply with the maintenance obligations and safety requirements

Table D: Category "D" Infractions

Sr. no.	Description of the infraction
	Safety
1	Damaged, or over worn tyres, poor quality retreading of tyres, poorly inflated tyres etc.
2	Causing Major road accidents.
3	Failure to deliver incident information on time, as required by MTC as specified in the Operator's Agreement
4	To refuse to accept the visits of MTC inspectors or authorized representatives. To hide information or to provide partial or erroneous information.
5	Failure to provide adequate information to MTC/ Police in relation to accident/s, injury to persons, damage to public / third party property
6	Misinformation or an attempt to hide anti-social incidents on the bus or accidents en-route
7	Driver carrying weapons/arms of any kind on board the bus/ on person while on duty

Table E: Category "E" Infractions

Sr. No.	Description of the infraction
1	Over speeding, rash driving (driving bus beyond prescribed speed limit as notified from time to time)
2	Driving drunk on duty or driving the bus while in a drunken state
3	Tampering of speed governors
4	skipping red signals, stopping the bus beyond the stop line at traffic signals

Table F: Category" F" Infraction

Sr. No.	Description of the infraction
1	"Serious nature of breakdowns" means breakdowns in those critical systems of bus such as which may result in fire, heavy damage to bus, major injury etc.

Table G: Category "G" Infractions

Sr. No.	Description of the infraction
1	"Fatal Accidents" means any incident in which bus involved on road/ inside MTC's depot / parking premises, which causes death to passengers / pedestrians.

SCHEDULE-T : PANEL OF CHARTERED ACCOUNTANTS

(See Clause 26.2)

1 Panel of Chartered Accountants

Pursuant to the provisions of Clause 26.2.1 of the Agreement, the Authority and the Operator shall prepare a mutually agreed panel of 5 (five) reputable firms of Chartered Accountants having their registered offices in India (the "**Panel of Chartered Accountants**"). The criteria for preparing such Panel and the procedure to be adopted in this behalf shall be as set forth in this Schedule-T

2 Invitation for empanelment

2.1 The Authority shall invite offers from all reputable firms of Chartered Accountants who fulfil the following eligibility criteria, namely:

(a) the firm should have conducted statutory audit of the annual accounts of at least one hundred companies registered under the Companies Act, 1956, or the Companies Act, 2013, of which at least ten should have been public sector undertakings;

(b) the firm should have at least 5 (five) practicing Chartered Accountants on its rolls, each with a minimum experience of ten years in the profession;

(c) the firm or any of its partners should not have been disqualified or black-listed by the Comptroller and Auditor General of India or the Authority; and

(d) the firm should have an office in the State or in an adjacent State with at least 2 (two) practicing Chartered Accountants on its rolls in such State.

2.2 Interested firms meeting the eligibility criteria shall be required to submit a statement of their capability including the bio-data of all the practicing Chartered Accountants on its rolls. In particular, each firm shall be required to furnish year-wise information relating to the names of all the companies with an annual turnover exceeding Rs. 25,00,00,000 (Rupees twenty five crore) whose annual accounts were audited by such firm in any of the preceding 5 (five) Accounting Years.

3 Evaluation and selection

3.1 The information furnished by each firm shall be scrutinised and evaluated by the Authority and 1 (one) point shall be awarded for each annual audit of the companies specified in Paragraph 2.2 above. (For the avoidance of doubt, a firm which has conducted audit of the annual accounts of any such company for five years shall be awarded five points).

3.2 The Authority shall prepare a list of all the eligible firms along with the points scored by each such firm and 5 (five) firms scoring the highest points shall be identified and included in the draft Panel of Chartered Accountants.

4 Consultation with the Operator

The Authority shall convey the aforesaid panel of firms to the Authority for scrutiny and comments, if any. The Operator shall be entitled to scrutinise the relevant records of the Authority to ascertain whether the selection of firms has been undertaken in accordance with the prescribed procedure and it shall send its comments, if any, to the Authority within 15 (fifteen) days of receiving the aforesaid panel.

5 Mutually agreed panel

5.1 The Authority shall, after considering all relevant factors including the comments, if any, of the Operator, finalise and constitute a panel of 5 (five) firms which shall be deemed to be the mutually agreed Panel of Chartered Accountants.

5.2 After completion of every 5 (five) years from the date of preparing the mutually agreed Panel of Chartered Accountants, or such earlier period as may be agreed between the Authority and the Operator, a new panel shall be prepared in accordance with the provisions of this Schedule-T.

SCHEDULE-U : LIQUIDATED DAMAGES PAYABLE BY THE AUTHORITY

Clause	Event of default	Liquidated Damages
4.3 (a)	Delay in fulfilment (unless waived or extended by the Operator) of all the Conditions Precedent set forth in Clause 4.1.2	0.1% of the Performance Security per day subject to a maximum of 20% (twenty per cent) of the Performance Security
10.2.6	Delay in providing vacant access, constructive possession and license to possess the Maintenance Depots	Rs. 5000/day for each day of delay
10.3.2	Financial Close delayed solely on account of delay in grant of such vacant access and Right of Way	0.1% (zero point one per cent) of the Performance Security for each day of delay
10.3.4	Delay in providing Right of Way to the Operator	Rs. 1000/day for every 500 square meters or part thereof
27.1.3 & 27.1.4	Failure to maintain requisite balance in Escrow Account	3% above SBI PLR on the quantum of shortfall for the period of delay

SCHEDULE-V : LIQUIDATED DAMAGES PAYABLE BY THE OPERATOR

Clause	Event of default	Liquidated Damages
4.4 (a)	Delay in fulfilment (unless waiver or extended by the Operator) of all the Conditions Precedent set forth in Clause 4.1.3	0.1% (zero point one per cent) of the Performance Security for each day's delay until the fulfilment of such Conditions Precedent, subject to a maximum of 20% (twenty percent) of the Performance Security.
12.5.2	Delay in completing the Fit Out Works	0.1% of the Performance Security per day per bus allocated to the specific depot
13.6.2	Delay in procuring the Prototype Bus	0.5% (zero point five per cent) of the Performance Security for every week, or part thereof; subject to a maximum of 10% (ten percent) of the Performance Security
13.9.1	Delay in procurement of buses for reasons not directly attributable to a Delay Event	0.1 % of the Performance Security per day for each Bus whose procurement is delayed
14.1.5	Delay in rectifying Punch List items	1% (one per cent) of the Performance Security for each day of delay until all items of the Punch List for the particular bus are rectified
14.3	If COD does not occur for reasons not directly attributable to a Delay Event	0.1% (zero point one per cent) of the amount of Performance Security per bus times the number of buses allocated to the specific depot for each day of delay until COD is achieved
17.5.1	Damages for breach of Maintenance Obligations	INR 2,500 per bus for each day of delay until the breach is cured.
17.7	Operator does not maintain and/or repair the Bus in conformity with the provisions of this Agreement and the Maintenance Manual, and fails to commence remedial works within 15 (fifteen) days of receipt of a notice in this regard from the Authority	Authority to recover the cost of remedial measures from the Operator. In addition to recovery of the aforesaid cost, a sum equal to 20% (twenty per cent) of such cost shall be paid by the Operator to the Authority as Damage
19.5.2	Failure to complete remedial measures	INR 2,500 per bus times the number of buses allocated to the specific depot
20.2.3	increase in the Breakdown Factor by 0.1 (zero decimal one) above 0.5	0.1% (zero point one per cent) of the Monthly Fees.
20.6.4	for every number of Severe Safety incident occurrence	2% of the Monthly Fees for each incident.
21.1	Delay in achieving Financial Closure	0.1% (zero point one per cent) of the Performance Security per day
41.2.3	Failure to redress complaints	INR 2,500 per bus for each day of delay to rectify each of the complaints specified in the Complaint Register

SCHEDULE-W: OEM UNDERTAKING

(To be on non-judicial stamp paper of appropriate value as per Stamp Act) [To be executed by the OEM Supported by Board Resolution at the time of signing of the Concession Agreement]]

Date: .....
OEM Name and Address:
To,
(Name & Address of Authority) Dear Sir/Madam,

1. We, M/s (Name of the OEM) [are undertaking the Project] OR [are a shareholder of <name of the Operator> (Operator) holding ….% equity share capital in the Operator which has been incorporated as a Special Purpose Vehicle for undertaking the Project] OR [are indirectly holding ….% equity share capital in the <name of the Operator> (Operator) through our Associate namely M/s <name of the Associate> for undertaking the Project] for Procurement, Supply, Operation and Maintenance of _____Electric Buses and Development of Allied Electric and Civil Infrastructure on Gross Cost Contracting (GCC) under the Concession Agreement dated _____executed between the Authority and ourselves / Operator.
2. One of the conditions of the said Concession Agreement is that we have to provide warranty for product restoration to ensure continuous operation in case of Termination of the Concession Agreement under Clause 32 of Concession Agreement.
3. We hereby undertake that we pledge our unconditional & irrevocable product warranty for all goods and equipment forming part of mechanical & electrical systems in the electric buses supplied by the Operator, for the remaining term of the Concession Agreement from the date of termination of the Concession Agreement. We further agree that this undertaking shall be without prejudice to the various liabilities that the Operator would be required to undertake in terms of the Concession Agreement as well as other obligations of the Operator.
4. We undertake that we shall supply and replace all goods and equipment forming part of mechanical & electrical systems in the electric buses supplied by the Operator, for the remaining term of the Concession Agreement from the date of termination of the Concession Agreement, at the pre-defined rate as per the Comprehensive Maintenance Contract.
5. This undertaking is irrevocable and unconditional and shall remain in force till the end of Concession Period.
6. We are herewith enclosing a copy of the Board Resolution* in support of this undertaking.

Witness:

Yours faithfully,

(1) .....

(2) .....

(Signature of Authorized Signatory) on behalf of the OEM Name & Designation

.....

Name of the OEM .....

(Seal of OEM)

SCHEDULE-X : MONTHLY REPORTING FORMAT

Monitoring of Operation and Maintenance

Details of Depot	Date:		
Number of buses			
Daily assured km			
Assured km per month			
Per km fee (Rs/km) - Excl GST)			
Name of the city			
Address of the Depot			
List of Reports	Daily (Yes No)	Monthly (Yes/No)	Annual (Yes No)
Breakdowns			
Punctuality			
Frequency			
Availability			
Passenger Complaints			
Driver/Crew Complaints			
Major Accidents			
Minor Accidents			
Kilometers of operation			
ITMS availability			
Safety report			
Operational Infractions report			
Maintenance Inspection Report			
Scheduled Maintenance			
Unscheduled Maintenance			
Tests Report			
State of Health (SoH) of Battery			
Maintenance activities at Depots /Charging Stations			

SCHEDULE-Y : KEY PERFORMANCE INDICATORS- DAMAGES & INCENTIVES

Clause	Event of default	Condition required	Damages/ Incentives
20.2	Reliability - Damages	Number of Breakdowns per 10,000 (ten thousand) kilometers travelled by the Buses (the "Breakdown Factor")	0.1% of the Monthly Fees* for 0.1 increase in reliability factor above 0.5
	- Incentive		0.05% of the Monthly Fees for every 0.1 decrease in Reliability factor below 0.5
20.3	Availability Damages	Number of Buses available for operations in the start of Shift(s) as per the scheduled turn out time divided by total number of Buses planned	Damages payable per non available Bus Less than 100% and till 95%**- 50 kms/ shift/ bus** Less than 95% and till 90%**- 60 kms /shift/ bus** Less than 90% - 70 kms / shift/ bus
20.4	Punctuality - Damages	Time start of trips for trips operated daily in the relevant month ("Start Punctuality") and on-time arrival at the final destination (in accordance with the Deployment Plan) ("Arrival Punctuality"). The Start Punctuality shall be equal to or more than 90% in any month ("Guaranteed Start Punctuality") and the Arrival Punctuality shall be equal to or more than 80% in any month ("Guaranteed Arrival Punctuality").	For every 1% reduction in the Start Punctuality or the Arrival Punctuality in any month, as the case may be, as compared to the Guaranteed Start Punctuality or the Guaranteed Arrival Punctuality, in each case, for that month, it shall pay Damages to the Authority at the rate of 2% of the Monthly Fees.
	- Incentive		For every 1% increase in the Start Punctuality or the Arrival Punctuality over and above the Guaranteed Start Punctuality or the Guaranteed Arrival Punctuality, as the case may be, for that month, the Authority shall pay to the Operator an incentive equal to 0.05% of the Monthly Fees.
20.5	Frequency - Damages	% of the cumulative completed trips travelled by all Buses ("Trip Frequency") and % of the cumulative Bus Kilometers travelled by all Buses ("Bus Kms Frequency").	1% reduction in the Trip Frequency or the Bus Kms Frequency, 2% of the Monthly Fees
	- Incentive		1% reduction in the Trip Frequency or the Bus Kms Frequency, 0.05% of the Monthly fees.
20.6	Safety of Operations - Damages	Number of accidents per 10,000 kms (Ten thousand Kilometers) (the "General Safety") and the number of severe accidents per month (the "Severe Safety").	For every increase in number of accidents, by a factor of 0.01 as compared to the Assured General Safety, damages at a rate of 2% of the Monthly Fees shall be applicable. For every number of Severe Safety incident occurrence, Damages at a rate of 2% of the

Clause	Event of default	Condition required	Damages/ Incentives
			Monthly Fees for each incident shall be applicable.
	- Incentive		If the General Safety is less than 0.005, then for every 0.001 decrease in the General Safety, an incentive equal to 0.05% of the Monthly Fees shall be paid.
20.10	Limits of Damages KPIs Operational Infractions:	10% of the aggregate Monthly Fees payable. 5% of the Monthly Fees for that month.	

***Monthly Fees** shall mean the Fees payable to the Operator for each month after commencement of the Bus Services and which shall be calculated in accordance with Article 22;

SCHEDULE-Z: COMPREHENSIVE MAINTENANCE AGREEMENT

THIS COMPREHENSIVE MAINTENANCE CONTRACT AGREEMENT is entered into on this the ……. day of …….. 20…..

AMONGST

_____ Limited, a company incorporated under the provisions of the Companies Act, 2013 and having its registered office at (hereinafter referred to as the "**OEM**" which expression shall, unless repugnant to the context or meaning thereof, include its successors, permitted assigns and substitutes);

AND

The Metropolitan Transport Corporation (MTC) (Chennai) Ltd, represented by Managing Director and having its principal offices at Chennai (hereinafter referred to as the "**Authority**" which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors and assigns).

WHEREAS:

A. The Authority has entered into a Agreement dated with the Operator for Supply cum Operation and Maintenance Agreement dated (the "**SCOM or Concession Agreement**") for operation of Buses on build, own, operate and transfer basis ("**BOOT"**).

B. The OEM is a constituent/shareholder of the Operator and is bound for the obligations of the Operator under the Concession Agreement. As part of its obligations, the Operator has already provided a Product Warranty Undertaking to the Authority.

C. In furtherance to the Product Warranty Undertaking, the OEM is entering into this Comprehensive Maintenance Agreement.

NOW THEREFORE in consideration of the foregoing and the respective covenants and agreements set forth in this Agreement, the sufficiency and adequacy of which is hereby acknowledged, and intending to be legally bound hereby, the Parties agree as follows:

1 COMPREHENSIVE MAINTENANCE CONTRACT

1.1 Meaning

"Comprehensive Maintenance Contract" shall mean and includes

a) predictive, preventive and breakdown maintenance of Buses and Chargers

b) cost of consumables

c) repair and replacement of faulty parts, assembly, sub-assembly and ITS hardware

d) refurbishment of Buses as per the Concession Agreement on actual cost basis

e) periodic painting of Buses

f) labour costs

g) maintenance, upgradation and revision of vehicle control software installed in Buses

h) attending Bus related infractions

i) repairs for accidents resulting from poor maintenance of Buses, any other repairs required due to accidents on actual cost basis

j) periodic fitness, safety and any other mandatory certifications of Buses

k) attending driver complaints related to maintenance issues of Buses and

l) washing and cleaning of Buses

1.2 Applicability

In case of Termination of the Concession Agreement after COD and before the end of the Concession Agreement period, the OEM agrees to provide annual maintenance services for the Buses till the end of the original end date of the Concession Agreement period.

This Agreement is mutually exclusive with the Product Warranty Undertaking executed by the OEM for the purpose of executing the Concession Agreement by either the OEM or its Associate and it will become applicable only in the case of Termination of Concession Agreement.

1.3 Responsibility of the OEM

The OEM agrees to maintain Buses in operational condition till the end of the original period as per the Concession Agreement. Further, OEM undertakes to supply and/ or replace any consumables which may be required as per the Maintenance Schedule under the Concession Agreement.

The OEM will also ensure replacement of battery, motor or any other mechanical and electrical part of the Bus which is defected or has reached the end of its useful life.

2. CONSIDERATION

2.1 Amount of consideration

For providing the Annual Maintenance services by OEM, the Authority hereby undertakes to pay the OEM at the predefined rate of 5% of the applicable PK Fees (at the time of Termination) against the Actual Bus Kilometers ("**Monthly AMC Fees**") as per the Concession Agreement on a monthly basis till the end of the original Concession Period. For the purpose of calculating the Monthly AMC Fees, the PK Fees will be revised in accordance with the provisions of this Agreement.

Further, notwithstanding anything to the contrary contained under this Agreement or the Concession Agreement, the OEM agrees to replace battery when SoH falls below 80%.

3. DAMAGES PAYABLE

3.1 Key Performance Indicators (KPIs)

Article 20.2, 20.3 and 20.6 reflecting the Key Performance Indicators (KPIs) related to Reliability, Availability and Safety respectively, as per the

Concession Agreement should not be affected due to failure of OEMs to ensure regular maintenance of Buses. In case such KPIs are not met by the Buses after termination due to the reasons attributable to the OEM then in such case the OEM shall be liable to damages as per the following table:

KPIs	Condition required	Damages/ Incentives
Reliability	Number of Breakdowns per 10,000 (ten thousand) kilometers travelled by the Buses (the "Breakdown Factor")	0.1% of the Monthly AMC Fees* for 0.1 increase in reliability factor above 0.5
Availability	Number of Buses available for operations in the start of Shift(s) as per the scheduled turn out time divided by total number of Buses planned	Damages payable per non available Bus Less than 100% and till 95%**- 50 kms/ shift/ bus** Less than 95% and till 90%**- 60 kms** /shift/ bus Less than 90% - 70 kms / shift/ bus
Safety of Operations	Number of accidents per 10,000 kms (Ten thousand Kilometers) (the "General Safety") and the number of severe accidents per month (the "Severe Safety").	For every increase in number of accidents, by a factor of 0.01 as compared to the Assured General Safety, damages at a rate of 2% of the Monthly AMC Fees shall be applicable. For every number of Severe Safety incident occurrence, Damages at a rate of 2% of the Monthly AMC Fees for each incident shall be applicable.
Limits of Damages	10% of the Monthly AMC Fees	

3.2 Infractions

Damages on account of Infractions related to maintenance of Buses as defined in the Original Concession Agreement shall be payable by the OEM.

IN WITNESS WHEREOF THE PARTIES HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN

SIGNED, SEALED AND DELIVERED	SIGNED, SEALED AND DELIVERED
For and on behalf of OEM by	For and on behalf of Authority by
(Signature)	(Signature)
(Name)	(Name)
(Designation)	(Designation)
(Address)	(Address)

Schedule AA

SPECIFICATIONS OF PURE ELECTRIC AC DOUBLE DECKER TYPE I WITH ROOF BUS

1.0 Introduction and Scope

1.1. End-use requirement-oriented specifications, with maximum make / model neutrality, for fully built Electrically propelled air-conditioned (AC) Double Decker buses TYPE I with roof as per AIS 139 for non-BRT operations are brought out here. The Manufacturer / Operator of buses shall furnish technical details for assemblies / sub- assemblies/ systems / equipment as per Technical Specification of this Schedule in appropriate formats.

1.2. The specifications cover end use-based design, evaluation, fabrication & testing features of AC Double Decker bus for MTC Chennai operations for transportation of passengers mainly in Chennai Metropolitan areas. The bus design should be energy efficient, environment friendly, safe, functionally efficient and reliable besides meeting all statutory, CMVR, legal and other requirements including UBS-II wherever applicable, as also those related to easy passenger accessibility including for, passenger comfort, driver's work place, internal and external aesthetics, ease of repair and maintenance etc.

1.3. Offered bus Specifications shall comply with all applicable Central, State and local laws (including Acts, Rules & Regulations). These shall include, but not be limited to, the provisions of Disability Act 1995 as amended till date as well as those of state and local laws for accessibility, safety, noise and other requirements. The bus shall meet or exceed the Central Motor Vehicles Rules (CMVR) of India / Safety Norms, noise & other norms applicable at the time of supply. In the event of any conflict between requirements emanating from these specifications and those as per any statutory / legal, etc. in force, the superior / higher requirements / Standards shall prevail.

1.4. Compliances of the requirements specified in this schedule shall be established through a test agency (henceforth referred as "The Test Agency") identified in Rule No. 126 of CMVR.

1.5. Double Decker Air-Conditioned electric buses shall conform to the Specifications set out in this Schedule. The minimum Technical Specifications have been set out for following types of double decker buses:

Fully Built AC Pure Electric Double Decker Type I with roof Bus

1.6. The word "bus" shall mean the pure electric double decker bus to be used for the Project.

1.7. The word "bus" shall also mean a bus powered exclusively by an Electric Motor whose traction energy is supplied exclusively by traction Rechargeable Energy storage System – Rechargeable Energy Storage System (ReESS) installed in the vehicle suitable for operations in city conditions in Chennai Metropolitan areas.

1.8. The word “Bus” wherever it has been used in the specification (Schedule-AA) means the “ReESS Operated Double Decker Type I with roof Bus”. The bus shall meet all prevailing applicable Central Motor Vehicles Rules, 1989 read with AIS 049-2003 or as amended (hereinafter referred to as “CMVR”), norms for safety applicable on the date of manufacture and Bus Code AIS 052, AIS 153, AIS 139, AIS 140 and any revisions thereof [hereinafter called Bus Code] and Urban Bus Specifications-II (UBS-II) amended up to date, wherever specified in this schedule and all other (Central and Tamil Nadu state) norms and regulations on high voltage electric vehicles and buses.

1.9. The offered bus shall meet the Phased Manufacturing program (PMP) requirements and Performance & Efficiency Eligibility Criteria for Electric Bus Category Vehicle under PM E-Drive Scheme. The same shall be verified by MTC.

For this S.O. 4259(E) dated 29 September 2024 — PM Electric Drive Revolution in Innovative Vehicle Enhancement (PM E-DRIVE) Scheme and S.O. 1078(E) dated 3 March 2025 Annexure 5 - Phased Manufacturing Programme (PMP) for Electric Vehicles for eligibility under PM E-DRIVE Scheme – Table 2: PMP for Vehicle Category e-buses (M2/M3) shall be referred.

1.10. Bidder shall also comply with all the notifications / circulars issued by Ministry of Power pertaining to compliance for Electric buses.

1.11. The bus design shall be energy efficient, environmentally friendly, and safe and secured for transportation of passengers besides the following main attributes amongst others:

i) Passenger comfort & safety
ii) Ergonomically designed driver’s work area
iii) Ease of repair and maintenance
iv) Aesthetically designed interiors and exteriors
v) Ease of boarding and alighting for all passengers
vi) Safety, reliability & durability
vii) Energy Efficient

1.12. Where there is conflict between the requirement as per any applicable law in force and the requirement emanating from these specifications, whichever of these two is of superior / higher standard, shall prevail. In this regard, decision of the Authorities shall be final. Also, any specifications superior to the ones set out as Minimum Technical Specifications shall meet requirements of the contract.

1.13. Source of Data:

A. BIS Standards are available from Bureau of Indian Standard, Manak Bhawan, 9-Bahadur Shah Zafar Marg, New Delhi-110 002. Web site: http://www.bis.org.in.
B. AIS Standards are available from Automotive Research Association of India, Post Box No.832, Pune – 411 004. Web site: http://www.araiindia.com.
C. ASRTU Specifications are available from Association of State Road Transport Undertakings, ASRTU Bhavan, Plot No 4A, PSP Block, Pocket -14, Sector - 8, DWARKA, New Delhi-110 075. Web site: http://www.asrtu.org, E-mail address: asrtu@de12.vsnl.net.in
D. UBS-II Link: http://www.indiaenvironmentportal.org.in/files/file/Urban-BusSpecifications-II.pdf
E. Tamil Nadu Motor Vehicle Rules link: https://www.tnsta.gov.in/Indexes/actrules
F. PM E-Drive scheme: S.O. 4259(E) and S.O. 1078(E) — PM Electric Drive Revolution in Innovative Vehicle Enhancement (PM E-DRIVE) Scheme including Operational guidelines issued by MHI - https://pmedrive.heavyindustries.gov.in

Note: In this schedule wherever, standards / codes / regulations / or any other document are mentioned, the latest version of the same shall be applicable at the time of supply, unless otherwise mentioned specifically.

2.0 General Design Features

2.1. The full forward control pure electric city bus shall have right hand drive design and be fitted with Electric Motor(s) for propulsion. The bus shall be designed and manufactured in accordance with the specifications set in AIS-052: Code of Practice for Bus Body Design & Approval [Bus Code] amended up to date. Further applicable provisions of AIS 140 / IS: 16833 for ITS, AIS 145 for additional safety features, AIS 150 for Braking requirements for approval of vehicles M3, AIS 153 for additional requirements for Bus construction and AIS 139 for Double Decker buses, AIS 038 for Electric Power train vehicles - Construction and functional safety requirements are required to be complied. Other Standards relevant for compliance of Electrical Vehicles, are AIS 039 for measurement of electrical Energy Consumption; AIS 040 for Measurement of range; AIS 041 for measurement of Net Power and maximum 30 minutes power and speed; AIS 046 for Safety requirement of Traction Battery; AIS 049 for CMVR requirement for Electrical Vehicles; AIS 135 for FDAS / FDSS etc.

2.2. Vehicular Mass: Considering the city bus application passenger occupancy varies a lot throughout the daily operations. Peak hour occupancies are substantially high. For the purpose of this schedule, peak payload is calculated with following presumptions.

Peak payload for the buses shall be taken as 66 seated passengers plus 2 times standee passengers (No. of standee passengers calculated as per AIS 052) plus luggage (7.5 Kg per passenger) carried by 50 % of total passengers distributed evenly in the passenger area. No standees are to be considered in upper deck.

For all purposes, wherever maximum Vehicular mass (**M_{max}**) is required to be considered, it shall be arrived at by adding the peak payload to curb weight of the vehicle as declared by manufacturer or Manufacturer's Declared GVW whichever is higher.

The bus shall be provided with safety interlock that shall give audio-visual warning signal on dashboard in Driver's compartment, when the bus gets loaded in excess of M_{max} as defined in this clause. If this overload situation continues beyond 2 to 3 minutes, bus shall automatically go into Limp home mode (it can't be driven beyond speed of 10 kmph).

Explanation - (This requirement is specified for assured range and passenger safety. With overload range will affect adversely and re-energising the ReESS is time consuming. This being double deck configuration, CG of the vehicle is higher than for single deck bus, thus prone for overturning.)

2.3. The bus design shall be suitable for daily operation of 12 to 16 hours in city service with starts / stops after every 200 to 300 m. To take care of the M_{max} as mentioned in Cl. 2.2, the bus shall have buffer motor capacity in terms of KW to pull this load comfortably over a gradient of 17%, and have sustained drivability at the average speed of 28 - 30 kmph, with starts / stops after every 200 to 300 m on the road flyovers / steep road gradient (whichever is severe) in City of Chennai and Chennai metropolitan area. For gradability and sustained drivability tests, all auxiliary loads connected to powertrain and / or to Renewable energy source (Battery) shall be in ON condition.

2.4. Bus shall be designed to carry commuters in the urban / municipal areas mainly in the corridors of Chennai Metropolitan Area, with possible interventions to facilitate ease of boarding and alighting especially for ladies, children, senior citizens and Persons with Disabilities (PwDs).

2.5. The bus design shall be eco-friendly, energy efficient, safe, and comfortable. Specific attention shall be provided at the driver's work area to provide pleasing and healthy working atmosphere / conditions, minimise work load and operational fatigue through automation and ergonomic design.

2.6. Bus and complete aggregates shall comply with the rules, regulations and statutory requirements, with respect to safety, performance etc. notified and mandated time to time by the government and applicable at the time of the delivery and the registration of the buses. To ensure compliance, type approval certificate from the approved test agency under CMVR shall be necessary for the Fully-Built Bus for the applicable rules, regulation and specifications laid herein that shall be produced at the time of submitting the bid. For procurement, only fully built bus complying with and Type Approved as per specification laid herein, shall be eligible. Apart from CMVR type approval from a test agency as in Rule 126, any additional performance related requirements specified in this schedule are to be certified by the accredited test agency.

2.7. Ambient Conditions: The bus shall be having proven design suitably modified to the climatic & operational conditions, infrastructure and road conditions in Chennai Metropolitan areas. Typical climatic operating conditions could be

temperatures of approximately 20° to 50°C, humidity level from 30% to 100%, and altitude up to 50 m. Concessionaire is strongly advised to ensure that buses are able to meet the severe temperature, humidity, saline atmosphere, water logging considering height from mean sea level, cloud burst type torrential rains, and cyclonic storm conditions of Chennai Metropolitan areas a bus shall be most likely to experience during operation.

2.8. The bus design shall be such as to meet all statutory requirements applicable for Chennai Metropolitan areas in all respects. Further, the bus structure should meet the requirements of structural strength, stability, deflection, vibration, etc. amongst others for at least the following main loads:

- Static loads
- Dynamic loads
- Single wheel bump loads
- Double wheel bump (diagonally opposite) loads
- Braking and acceleration loads
- Rollover
- Speed Breakers, road bumps & pits, induced loads

For the compliance to above requirements, a design type approval by The Test Agency as per Annexure 3 of UBS II shall be submitted at the time of prototype approval. For Design Type Approval loads calculated based on M_{max} as defined in clause 2.2 above shall be considered.

2.9. The bus loaded to M_{max} under static conditions, shall not exhibit deflection or deformation that impairs the operation of steering mechanism, doors, windows, passenger escape mechanisms and service doors, etc.

2.10. The material used in the construction of buses shall be as per Bureau of Indian Standards (BIS)/ Automotive Industry Standards (AIS) specifications. In absence of above specifications, Association of State Road Transport Undertakings (ASRTU) specifications could be followed. Wherever Indian standards are not available, internationally acceptable standards may be referred / followed.

2.11. The bus shall be designed and manufactured with all applicable fire safety regulations on urban transit buses for prescribed upholstery material, fire retardant cables, connectors etc. These provisions shall include the use of fire retardant / resistance materials, fire detection systems, firewalls, and facilities for passenger evacuation (doors, windows and escape hatches) as per statutory requirements in addition of the Bus Code. Flammability requirements shall comply with IS 15061.

The bus shall be designed and constructed with respect to its body and different aggregates / systems / sub systems to operate in service conditions specified in clause 2.3 and ambient operating conditions as specified in clause 2.7 for 12 years or 8,40,000 km (150 km per day x 350 days X 12 Years)

Operator to ensure refurbishment of vehicle after 6 years from the date of

commercial operation date (COD). Refurbishment of buses to be in best conditions with completion of all missing components, proper working of major aggregates/ assemblies/ sub-assemblies, replacement of damaged body panels, replacement of cushions of passenger seats, flooring, structural members etc.

2.12. For the purposes hereof, Design shall mean and include plans and drawings of the Buses or sub-system or equipment thereof. Provided that the Operator may share only details regarding the layout of the bus and not any other propriety information.

2.13. All designs shall include feature of ease of maintenance and service of the respective sub-systems.

2.14. All designs and drawings including maintenance & service manuals shall be supplied in hard copy, in duplicate, and in electronic form. All drawings shall be provided in auto-cad format.

2.15. All designs and drawings shall conform to and refer to the relevant provisions in the Specifications and Standards.

2.16. All designs and drawings shall be in English.

2.17. Detailed schematic drawings of bus structure, seats, interior / exterior fittings, electrical systems, wiring looms / harness, Lighting and Light signalling items and other accessories along with complete details of materials used, their specifications etc. shall be provided by the bus manufacturer. Detailed Circuit diagrams for electrical be also provided by the bidder / bus manufacturer. Electric wiring in the bus (other than EPS) shall be of multiplexing type. Additional details of wiring for electric propulsion system, inter-alia indicating location of ReESS packs, traction controller, cooling system, safety mechanisms, etc. with appropriate colour code etc. shall be supplied with the bid.

2.18. Details of general appearance, seating layout and structural of roof, floor, sides, front & rear facia and driver's cab, etc. shall be supplied. Major dimensions of the fully built bus i.e., overall length, overall width, overall height, saloon height, pillar to pillar distance, seat pitch, number of seats (excluding seat for the driver), standee area, entry / exit gates and emergency exits, their fastening arrangement and the accessibility mechanism, etc., mounting arrangement for ReESS packs, drive motor/s, traction controller, etc. shall be supplied along with the schematic diagrams / printed literature of the bus.

2.19. List of consumables & spares to be maintained, operation and maintenance manual along with fault diagnostics for major systems and sub systems, Periodical maintenance schedule for obtaining the specified life of the bus be also be provided in hard copy (2 No.) and soft copy (2 No.).

2.20. Suitable traps / openings with appropriate sealing and covers shall be provided for repair and maintenance of various aggregate / systems /sub

systems / chassis / body / their components, etc. of the bus.

2.21. Fire Safety: Fires in Li-ion batteries / other traction batteries for EVs though not frequent, are severe and very difficult to suppress once they are developed, hence it is a major concern. Therefore, early detection should be key safety aspect in any electric vehicle. Li-ion and other batteries used for buses, in case of a malfunction, may lead to serious consequences. Storing large amounts of energy, whether it is in large batteries used in energy-storage applications or batteries used in electric vehicles can be inherently dangerous as energy stored in a confined space tries to escape, sometimes violently. As a result, Li-ion and other batteries are susceptible to spontaneous ignition and subsequent explosion due to overheating, which may be caused by electrical short-circuiting in the system and / or even within the battery amongst cells, rapid discharge, overcharging, manufacturing defects, poor design, or mechanical damage, among many other causes. This might cause thermal runaway and the release of a flammable electrolyte. A thermal runaway produces enough heat to cause adjacent battery cells to ignite thus resulting into a fire that propagates to other cells in vicinities. Li-ion and other battery fires have different characteristics and spread quickly in comparison to normal fires which makes extinguishing such fire very difficult. The different susceptible areas for fire are to be protected in various ways by robust detection and suppression systems – both liquid and gas-based and / or any other effective method.

A comprehensive solution for fire mitigation is required along with the robust detection system. A full-coverage multi-area fire-protection solution is essentially required on the electrical buses specifically for vulnerable passenger saloon areas on lower and upper deck as well. A liquid-based extinguishing agent, which is non-corrosive, may be used as one part of the complex system solution, also to provide effective cooling capacity to slow the fire development, allowing safe evacuation of passengers. In order to cover all risk areas in an EVs, the main risk scenarios may be divided into protection areas such as, passenger compartments, high voltage areas and control panels, channels of wiring harnesses and high voltages cables, Traction battery compartment, both for protection of batteries from outside fire and containment at battery fire / thermal runaway.

The different areas shall be thus protected in various ways by robust detection and suppression systems – both liquid- and gas-based solutions. The FDSS needs to achieve early detection of battery malfunction in order to shut the battery down before a full thermal runaway occurs and further design the suppression systems for vehicles powered by Li-ion and other batteries in an optimised way of formulation of extinguishing agents and possible integration within the Li-ion / other batteries management system. The vehicle manufacturer shall provide the detailed write up on the FDSS system being provided in the bus being offered against this Tender while submitting the bid.

2.22. The bus shall be designed and manufactured with all applicable fire safety regulations AIS 135 under CMVR / Bus Code for safety for electric buses for prescribed upholstery material, fire retardant cable, connectors etc. Specific needs arising due to Double Deck configuration must be addressed,

specifically for emergency evacuation scenario. These provisions shall also include the use of fire-retardant material, fire detection system, fire walls and facility for passenger evacuation (emergency doors, windows, intercommunication staircase from lower deck to upper deck and escape hatches) as per statutory requirements besides Bus Code. Flammability requirements shall comply with IS 15061 as specified in CMVR. Fire Detection & Suppression System (FDSS) shall have a robust design that shall take into account situations of false inputs, this feature is specifically essential for FDSS. FDSS shall have a provision to periodically verify their effectiveness through simulated triggers. Vehicle manufacturer shall submit the test protocol for the same that shall be part of operation and maintenance manual.

2.23. Electric propulsion system compartment/s shall be insulated to avoid transmission of heat and noise to saloon area. This firewall shall preclude or retard propagation of an electric propulsion system compartment fire into passenger compartment. Only necessary openings shall be allowed in the firewall, and these shall be fireproofed. Wiring may pass through only if connectors or other means are provided to prevent or retard fire propagation through the firewall. Electric propulsion system access panels in the firewall shall be fabricated of fireproof material and secured with fireproof fasteners. These panels, their fasteners, and the firewall shall be constructed and reinforced to minimize warping of panels during a fire that shall compromise integrity of the firewall.

2.24. Specifications related to Fire Detection and Suppression System (FDSS) - General Requirements

i) FDSS provision is to be made in the bus at appropriate location(s) for detection, alarming and suppression about any likely fire at all fire prone systems / sub-systems (bus supplier to identify such fire prone systems / sub-systems and make above provisions). Due consideration is to be given specifically for double decker aspect of the bus having vulnerable upper and lower deck passenger saloon areas.

ii) Buses shall be equipped with fire detection & suppression system detecting fires in the fire prone areas based on sensors that sense either abnormally high temperature or rate of temperature rise, or both and or any other associated parameter. FDS System shall be robust in logic so as not to get activated on false alarms.

iii) Upon detection of fire in the fire prone areas, the FDS system referred to, shall provide the driver with both an audio and a visual signal, activate the hazard warning signal on both upper and lower decks and activate fire suppression system. The placement of the visual alarm shall be such that it is visible unobstructed while viewed from the driver seat.

iv) The FDSS shall simultaneously be able suppress the fire immediately after detection.

v) The detection & suppression system shall be operational irrespective of whether electrical propulsion system of bus has been started and the vehicle's

attitude.

vi) The fire detection & suppression system shall be installed according to the system manufacturer's installation manual.

vii) An analysis shall be conducted prior to the installation in order to determine the location of fire detectors and alarm system. Failure mode and effect Analysis for fire hazards shall be carried out to identify potential fire hazards and fire prone areas. The FDSS shall be configured and positioned so as to commence suppression of the fire hazard immediately. The system shall also be ensured to work promptly and effectively regardless of the vehicle's attitude, road conditions etc.

viii) Fire hazards to be taken into account in the analysis shall at least consist of the following: Components whose surface may reach temperatures above the auto-ignition temperature for fluids, gases or substances that are present in the fire prone areas and electrical components and cables with a current or voltage high enough for an ignition to occur as well as hoses and containers with flammable liquid or gas (in particular if those are pressurized). The analysis shall be fully documented and submitted as a part of bid document.

ix) The Fire Detection and Suppression System (FDSS) as specified in AIS 153 installed in the Buses shall comply with the requirement of AIS 135, UBS II as applicable to EVs, CMVR, other relevant standards and also conforming to best industry practices.

x) Make, model, specs etc. of various components / sub-systems / system of FDSS shall be clearly indicated for each item as part of the offer. A detailed drawing of the system details / specs shall also be provided for.

3.0 Electric Drive / propulsion and control Systems

3.1. Electric Drive / Propulsion and energy storage systems capable of providing sufficient kW to obtain desired performance in respect of defined acceleration levels shall be provided. The drive shall have adequate kW (Minimum 5 kW per Ton of vehicle Mass, M_{max} as specified in clause 2.2 of this schedule) not only to propel the bus but also to operate all other auxiliary devices (VAC, ITS and any other) fitted directly to them / it, if any. The electric drive / Propulsion systems can be designed as one central electric / Propulsion systems propelling the rear axle via a shaft and a differential or as two-wheel axle or hub / Propulsion systems.

As the bus is required to be operated in urban environments and scenario, characterised by frequent stops and starts, electric propulsion system of adequate power for efficiently negotiating such frequent stops & starts, urban area gradients, and to achieve adequate acceleration etc. at, M_{max} shall be provided. Considering this aspect drive system shall have high torque at lower RPM spread over wide range. A graph / table of torque – speed characteristics shall be provided along with the technical bid. The power and ReESS rating, control system / mechanism along with associated software & hardware and an energy-efficient drive / Propulsion system shall be provided for obtaining

above performance levels and shall be demonstrated by complying test protocol mentioned in clause 2.3 of this schedule.

The Propulsion system shall be designed to operate for not less than 12 Years or 8,40,000 km as mentioned in Clause 2.11 without major failure or significant deterioration albeit with periodic maintenance and overhauls as recommended by Bus manufacturer.

3.2. Performance data / curves / charge - discharge cycle curves and other details of the electric propulsion system have to be supplied during proto inspection. A detailed set of calculations indicating adequacy of said electric propulsion system for proposed urban bus be provided along with all performance parameters of selected electric propulsion system.

3.3. The electric drive / Propulsion systems shall have a generator function for recuperating braking energy (kinetic energy). The Electric Regenerative Braking system of Category B as defined in AIS 049 shall be provided. The Electric Regenerative Braking system provided shall be integrated through brake ECV with main / service brake system such that the transition from regenerative braking to mechanical braking shall be smooth and jerk free.

3.4. The drive and its accessories shall be easily replaceable. The drive / Propulsion systems mounting shall be such as to minimize transmission of vibrations to the bus structure. The drive / Propulsion systems should be suitably designed to operate optimally under Chennai Metropolitan area's peak summer heat and humidity. Electric propulsion system design shall be such that it shall not be overheated during normal urban operating conditions of vehicle. An arrangement for audio-visual signal shall be provided, in the event of electric propulsion system, ReESS or any of its subsystems getting overheated excessively. The temperature at which signal operates shall be indicated. Similarly, provision of monitoring key performance and safety parameters for other sub-systems of electric propulsion system through audio-visual indicators on dashboard shall be provided. The electric propulsion system shall be equipped with electronic controller / management and on-board diagnostic system. For those parameters which are critically important considering the safety of passengers, in addition, audio-visual alarms and safety interlocks shall be provided. Manufacturer to provide a write up on Propulsion system and its management system.

3.5. Propulsion systems noise shall confirm to the Central Motor Vehicle Rules (CMVR) / AIS / any other applicable Indian standards. In case of multiple norms, the most superior of these is to be adopted and as applicable for Chennai.

3.6. Electric propulsion system noise and chemical, electro-magnetic emission levels, if any, shall conform to the national / international and or any other industry Standards, adopting the most superior one.

3.7. Specific power consumption test as per AIS 039, Range test as per AIS 040, Net power and Max. 30-minute power test as per AIS 041 of electric propulsion system shall be conducted by The Test Agency and reports

submitted at the time of prototype approval.

Allowed Specific Energy Consumption of e-Bus when tested as per AIS 039 (latest revision) with AC switched ON condition (Annual Average) with GVW, shall be 1.4 kWh/km or less (Ref. PM E-Drive scheme notification).

3.8. The mounting of the drive / Propulsion systems and the ReESS shall be designed and manufactured to take care of their malfunction during torrential rains, water logging or high-pressure washing system water from entering into the drive / Propulsion systems.

3.9. The Electric powertrain shall be equipped with an electronically controlled management system and 24-volt battery electrical systems. Full electronic management of powertrain shall include on-board diagnostic and driver alerts for crucial parameters for ReESS System, axle load control, Lubrication system, Motor, ReESS coolant system, Vehicle performance (powertrain specific). In addition to the requirements of OBD II as per CMVR, the bus should have suitable audio and visual indication for the driver to be displayed at the dashboard to recognize the mal-functioning of

a) speed limiting device,

b) ReESS and its cooling system,

c) other systems that are crucial for safe functioning of the vehicle that have direct effect on passenger safety and

d) high voltage cabling system unsafe situations

e) tyre pressure

3.10. Traction Controller System: An efficient traction controller and / or any other appropriate mechanism / device to efficiently regulate speed-power relationship for the electric propulsion system shall be provided for facilitating smooth, effective and jerk-free drive of the bus. All operational controls / buttons / switches etc. shall be conveniently located within easy reach of the driver. The traction Controller System and the controls / operational sub-systems shall be easily accessible for repairs and also shall be easily replaceable. The documentation of complete system details shall be supplied with the bus.

3.11. Traction Controller System be fitted with a mechanism which makes it possible to operate reversing mechanism only when vehicle is stationary.

3.12. Additional important performance requirements as per urban bus specification (UBS II) are as given in the table below.

Table 1: Some of the salient technical requirements of AC Double Decker bus

S. No	Parameter Description	Specification
1.	Power to $\mathbf{M_{max}}$ as defined in Clause 2.2.	Limit and testing as per as per AIS:153 subject to meeting design requirements on peak load
2.	Acceleration	As per AIS:153 or ≥ 0.8 m/sec/sec minimum at adequate kW Power, whichever is superior
3.	Speed 0 – 30 Kmph	As per AIS:153 or ≤ 10.5 sec maximum, whichever is superior
4.	Gradability (stand-start) at GVW	17% minimum with all auxiliary loads connected
5.	Sustained Drivability at $\mathbf{M_{max}}$	Cl. No. 2.3 of this schedule
6.	Maximum Speed at (without Speed Limiter)	75 Kmph

3.13. The acceleration shall meet the requirements as stated above and shall be sufficiently gradual and smooth to prevent throwing standing passengers off balance.

3.14. Speed Limiting Device

Maximum speed of bus shall be limited to 40 kmph or as prescribed in Chennai metropolitan area through / Propulsion systems management system at the time of manufacturing stage itself. Any amendment thereto should only be possible by the vehicle manufacturer at the written instructions of the Transport Department of the state of Tamil Nadu. Type approval certificate to establish compliance to AIS 018 issued by The Test Agency shall be produced during Prototype approval stage. An audio-visual signal shall be provided for on dashboard / instrument panel when the system performs speed limiting function and speed goes beyond set limit. The malfunctioning of the system shall also be signalled suitably at dashboard instrumentation.

4.0 High voltage system

4.1. The high voltage system consists of

- the ReESS,
- the electric drive / Propulsion systems,
- power electronic components like inverters or converters,
- HT cabling and connectors, and

- Additional equipment like fuses, switches etc.

4.2. The high voltage system shall conform to all applicable norms, standards and regulations for electric vehicles. The manufacturer shall provide a list of norms, standards and regulations to which the buses conform.

4.3. The high voltage system shall be separable from the ReESS by a suitable mechanism.

4.4. Two emergency circuit breakers shall be installed at each bus, one next to the driver's seat and one at an easily accessible compartment of ReESS that can be accessed from outside the bus. The emergency circuit breakers shall switch off the high voltage system completely and shall be secured against unintentional switching on.

4.5. The bus shall be provided with measurement points properly identified, where the actual voltage of the high voltage system can be measured.

4.6. Each bus shall be equipped with a safety card, which explains the high voltage system and provides information on safety aspects for rescue workers.

4.7. Any critical failure in the high voltage system including the electric drive / Propulsion systems and the ReESS shall be displayed at the dashboard in a suitable way.

4.8. Precautionary safety instructions related to High Voltage system for commuters shall be prominently displayed in both the upper and lower decks.

5.0 Rechargeable Energy Storage System (ReESS), its management

5.1. Electrically propelled vehicles must meet and satisfy all requirements of "code of practice for Electric Propulsion system vehicles", safety and other requirements as per AIS 052 (Bus Code), safety and type approval as per AIS 049, and AIS 038 Safety requirements of traction batteries and as per any other applicable standard and procedures; regulatory requirements as per CMVR /Tamil Nadu MVR and any other applicable regulations for operation in the city of Chennai and its metropolitan areas.

5.2. The buses shall be equipped with suitable ReESS with advanced chemistry viz. Lithium Ion Battery and those mentioned in PM E-DRIVE Scheme that meets the requirements regarding acceleration, range and life. The Battery chemistry shall be suitable for fast charging method. The ReESS management system shall have built-in Auto cut off feature for getting optimal battery life / range. To avoid the getting stranded midway due to depleted energy level, the ReESS management system shall provide limp home feature when the State of Charge (SOC) reaches the threshold limit. This limit shall be settable depending upon operational requirements.

5.3. The ReESS shall be placed in one or more compartments which protects it against heat, moisture, water and dust. The compartments should not be located at damage prone areas of the bus.

5.4. Cooling system shall efficiently dissipate heat from the electric propulsion system, ReESS and other subsystems wherever required. Replacement / maintenance of battery cooling system and its items shall be capable of being easily carried out. Full details of battery cooling system specifications, cooling capacity, cooling medium, and repair & maintenance procedures etc. shall be supplied. An audio and visual warning shall be displayed at the dashboard in the event of malfunctioning of the cooling system.

5.5. As regards to the safety management of the ReESS / Battery, it shall comply with AIS 048.

The ReESS shall provide adequate numbers of charging and discharging cycles up to 80% of the original Ampere Hour energy content rating i.e. State of Health (SoH) of ReESS, for the use in Mobility application, taking the ambient conditions as described in Clause 2.7 of this schedule into consideration.

Bus manufacturer needs to provide lifetime (12 years) warranty for the battery, electric motor, and controller. The warranty also requires the manufacturers to replace batteries when the state of health (SoH) falls below 80 percent.

Manufacturers need to meet high safety standards for battery packs. These standards include a protection level that is no less than IP67— which represents a high water and dustproof battery pack—and satisfactory operation safety in extreme temperatures ranging from 0 to 65°C.

5.6. The ReESS shall be suitable to meet the ambient conditions and the operational conditions as described in Para 2.0 of Schedule AA. The ReESS shall be equipped with a suitable cooling system that takes the climate conditions in Chennai Metropolitan areas into consideration.

5.7. The state of charge (SOC) shall be displayed on the driver's dashboard in a suitable way. Optionally, an estimation of the remaining range is to be displayed.

5.8. The ReESS shall be sufficient capacity (AH) for a minimum range of 150 km (per charging of 80 % SOC) to meet the operational conditions as described in Para 2 of Schedule AA and minimum 200 km per day with one opportunity fast charging of up to 30 minutes (depot-in, depot-out basis or at any terminal).

The Operator shall get the specifications including the range of the bus certified from the approved agencies under the CMVR at the time of prototype approval of the bus. The testing agency should also certify that the bus model which is being certified meets the range of 150 km with bus loaded to declared GVW, with all auxiliary loads including V&AC and other (if any) connected.

Range means a distance that can be driven with a usable energy content of a ReESS without recharging. The minimum range of the ReESS at the time of induction should take into account the degradation profile of the ReESS as per technical documentation of the ReESS and the traffic conditions in

Chennai Metropolitan areas.

The lifecycle refers to the lifecycle of the ReESS as per para 5.5 of this Schedule. The range is to be certified for the usable energy content of the ReESS without recharging. The test process shall be as per AIS-040 (Rev 1: 2015) notified under CMVR No. 124. The minimum range of 150 km on a single 80% SOC (i.e. minimum autonomy) throughout its lifecycle of battery, shall be verified by testing.

ReESS shall be appropriately mounted on to the bus keeping in mind convenience of battery maintenance / charging / replacement etc., safety of system and its maintainability, operation in the Chennai Metropolitan Areas.

5.9. Charging Specifications and Standards:

The bidder shall have option of providing suitable (Fast / Slow / Swapping) type of Charging Infrastructure suitable for the intended operations at the project locations and operational ecosystem.

Sl.	Description	Specifications
1.	Standard to be complied	AIS 138 (Part I and II)
2.	Charging standard	CCS -2 DC fast charging
3.	Charging Time	Charging Time less than 5 hours- overnight charging.

5.10. ReESS Health Status

The Concessionaire shall set up an internal system to keep a daily record of the state of health of the ReESS measured on parameters as suggested by the ReESS manufacturer including the range achieved by the ReESS.

6.0 Suspension

6.1. The bus shall be fitted with electronically controlled Pneumatic (air bellow) suspension at front and rear axles. The suspension system shall be fitted with shock absorbers, anti-roll bars, or any other suitable system for trouble free operation and jerk free comfortable ride quality in existing road conditions of Chennai Metropolitan areas. The air suspension should be adequately protected from / Propulsion systems / any heat source etc. for minimizing ageing effect on the air bellows.

6.2. Electronic control module for suspension system shall account for controlling floor level, enhancing comfort by absorbing shocks in case of road irregularities, Uniform Spring rate in all loading conditions, auto-correction of bellow height to protect driveline angularity related problems, counter road unevenness, monitor bellow failures and provide passenger ride comfort to

commuters.

6.3. The full air suspension system both at front & rear shall be with stabilizer bar.

6.4. An electronic stability control system, if provided, shall comply with AIS 133. The TA certificate issued by The Test agency shall then be produced at the time of Prototype approval.

7.0 Steering System

Hydraulic / Electric power assisted recirculating ball type steering system having a provision for adjustments for angle and length shall be provided. It shall comply with CMVR requirements for steering efforts, and Turning circle radius.

8.0 Braking System

8.1. The electric drive / Propulsion systems shall have a generator function for recuperating braking energy (kinetic energy). The Electric Regenerative Braking system of Category B as defined in AIS 049 shall be provided.

8.2. In addition to regenerative service braking, the braking system shall be full pneumatic type with fail-safe dual circuit having four-way protection valve, auto slack adjuster, Disc brake at front axle - mandatory and at rear – Disc / Drum brake. Brake squeal shall be absent under normal conditions of operation. An air dryer which minimizes oil carry over shall be fitted. Braking system shall be fitted with air dryer and oil / water separator system.

8.3. Most of the braking shall be done by the electric brake for energy recuperation. The recuperation function (degree of recuperation) shall be adaptable.

8.4. At low speed and in case of high braking force, the electric and the pneumatic braking systems shall blend into each other to provide a smooth braking.

8.5. The Service braking system is to be provided with the regenerative electric braking. Excess electric energy recuperated during braking which cannot be stored into the ReESS or consumed by auxiliaries, shall be “destroyed” at a braking resistor or similar device for excess energy inflow.

8.6. The friction material shall be non-asbestos type having temperature and wear characteristics suitable for intensive city operation. The buses shall also be provided with hand operated pneumatic flick valve type parking brakes at rear wheels. The air pressure line shall be treated for corrosion resistance.

8.7. Electronic braking control system (EBS) shall provide uniform distribution of braking force on all wheels, contributing to smooth braking, optimizing braking with minimal pedal force thereby reducing driver fatigue. EBS shall monitor brake pad condition, brake pad temperatures, brake pressures and any other crucial parameter for effective performance of brake system under all possible city driving conditions.

8.8. In the event of failure of the drive / Propulsion systems and or loss of air in

the system, adequate provision should be there for obtaining effectiveness of service brake system and or for deactivating the spring actuated brakes.

8.9. The bus shall be fitted with Anti-Lock Braking System conforming to IS: 11852:2003 as per G.S.R. 389(E) dated 9.06.2014 as per latest requirement under CMVR.

8.10. The bus shall be equipped with Electronic Vehicle Control System (EVSC) and meet other requirements as per AIS:153 as applicable on the date of manufacture as per requirement under CMVR.

8.11. An additional provision for parking brakes is also to be provided to prevent auto application of parking brakes due to loss of pressure in the hand-brake line.

9.0 Wheels and Tyres

9.1. The Bus shall be fitted with 6 sets of (two on front and four on rear wheels) steel radial tubeless tyres of suitable size, ply rating, speed rating, load rating and conforming to AIS-044 Part I. The wheel rims of corresponding size conforming to IS: 10694 (part 3)-1991 and performance confirming to IS 9438. The load and speed rating of the tyres used for the bus shall be commensurate to meet the requirements of M_{max}. Manufacturer to specify relevant specifications of the tyre used. At the time of delivery of the vehicle, tyres fitted and spare tyre shall have date of manufacture not earlier than 6 months. Wheel area shall have adequate clearances all around for effective cooling of tyres. Louvres may be provided in the skirt panel, if necessary, providing ventilation for effective cooling of tyres and brakes. Provision shall be made for filling the air and checking the Tyre pressure in both the tyres of rear axles from outside. The tyre pressure monitoring system, if provided, shall comply with AIS 154. The bus to be supplied has to be fitted with same tyre as given in the TA certificate.

9.2. Splash aprons of minimum 6.50 mm thickness composed of rubberized fabric shall be installed behind wheels as needed to reduce road splash and protect under floor components. The splash aprons shall extend downward to within 100 mm of the road surface at static conditions with bus loaded at M_{max}. Apron widths shall be no less than tyre / wheel widths symmetrically fitted to cover whole wheel widths. Splash aprons shall be bolted to the bus under structure. Other splash aprons / metallic guards shall be installed where necessary to protect bus equipment from mud / splashing water / gravels like projectiles from running tyres etc.

9.3. Suitable guards conforming to the relevant AIS standard as prescribed in CMVR shall be provided as mud flaps as well as for protection against small stones hurled from tyres.

10.0 Axles

The bus shall be driven by heavy duty axle at the front and rear with adequate capacity to take care of Mmax & crush loading expected during life span of

the bus 12 Years / 8,40,000 km. Transfer of drive / Propulsion systems noise and noise from the differential to the bus interior shall be minimized. The drive shaft shall be guarded to prevent it striking the floor of the coach or the ground in the event of a tube or universal joint failure. For ease of locating jack during changing of tyres (both front and rear) axle area where jack is to rested shall be distinctively marked with yellow – black strips.

11.0 Protection against Fire Risk

11.1. A fire detection and Alarm and Suppression, system shall be installed at the traction energy storage compartment(s). In case of fire, the system shall inform the driver in a suitable way. In case of positive alarm, ReESS shall be cut off and isolated to mitigate any type of risk to passengers. For more details refer clauses 2.22 and 2.23 of this schedule.

11.2. All regulatory and legal requirements including those specified in AIS 153, regarding the fire protection of buses including the use of high voltage batteries shall be fulfilled. Detailed FDSS requirements have been laid down in clause no. 2.21 thru' 2.24.

12.0 Under frame & Structure

12.1. The under frame and super structure shall be suitably designed to carry crush load of peak payload as defined in Cl. 2.2 of this schedule, traction batteries, bus tare weight, etc. Moreover, the structure shall be designed to withstand the transit service condition of operation in Chennai Metropolitan areas during its life span. Front and rear structure design shall be energy absorption type to reduce impact stresses into under frame / side structures / other areas of the vehicle. Damaged area of the vehicle shall be easily repairable and or replaceable in the event of any major damage.

12.2. The bus shall be of integral construction as defined in Bus Code with the super structure fabricated using steel tubing (ERW– Rectangular / Square Sections) conforming to BIS 4923-1985 or latest, of grade Yst –240.

12.3. The comprehensive multi-stage anti-rust treatment by way of hot phosphating/ galvanizing shall be provided to bus flooring, sides, roof, under-structure, as per BIS 3618 Class-A2/ Galvanizing of MS Structural Members as per IS:277 - 2003 120 GSM coating for resistance to corrosion or deterioration from atmospheric conditions & road salts so as to enable them & frame to last for at least 12 years. The samples of all materials & connections shall withstand two weeks (336 hours) Salt Spray test in accordance with ASTM procedure B117 with no structural detrimental effect to normally visible surfaces & no weight loss of over 1%. The details of treatment along with certificate shall be provided with relevant specification to meet the service life of minimum 12 years. The system of corrosion prevention of the internal surfaces of structural tubing shall be provided and details of the same be given in the offered documents.

12.4. After anti corrosive treatment, structural members shall be coated with red oxide/ Zinc Chromate primer & superior quality black paint. Further, Entire

surface of bus under floor and sides exposed to ground shall be covered with appropriate corrosion prevention & flame-retardant paint coating for protection against harmful effects of water, mud etc. and to retard flames, if any.

12.5. During structural assembly operations, a number of holes are drilled and / or weldments made after the corrosion prevention treatment of components / structural items / members causing loss of such treatment and exposing these items to corrosion. Manufacturer shall take sufficient care to carry out corrosion prevention of items so exposed to effectively prevent corrosion.

12.6. Sufficient clearance & air circulation shall be provided around the tyres, wheels when loaded at M_{max}, and brakes to preclude over-heating when the bus is operating. Cut-outs in side panels at appropriate level and of appropriate size & shape may be provided to divert passing air around tyres, wheels & braking system.

12.7. Under floor to sidewalls shall be sealed to prevent dust and water ingress.

13.0 Bumpers

The bus shall be provided with front and rear bumpers of FRP moulded constructions. The bumper shall be easily repairable / replaceable. The bumpers shall conform to the requirements of CMVR and AIS-052.

14.0 Panelling

14.1. The bus exterior side panels shall be fitted with stretched GI sheet at waist level. The exterior front-end panelling shall be of steel sheet or FRP. Roof shall be of Al sheet. Rear shall be of GI sheet or FRP. Skirt panelling shall be of Aluminium sheet having thickness of minimum 1.5 mm. Appropriate treatment shall also be provided to avoid any incidence of galvanic corrosion between dissimilar metals. Bus manufacturer may use alternate material considering climatic conditions of Chennai Metropolitan areas mentioned in clause 2.7 of this schedule to ascertain expected structural life of 12 Years or 8,40,000 km whichever is earlier as mentioned in clause 2.11 of this schedule.

Panels shall not have any waviness & shall be so mounted as to present smart aesthetic exteriors. The exterior front-end panelling and Rear panelling of Fibre Reinforced Polymer (FRP), 3-layer, 450 gsm, with equivalent performance shall also be acceptable."

14.2. All side skirt panels below stretch panel line must be no longer than 1500 mm and be of such design that the panel should rest on the pillars. All the panels shall be hinged on the side structural member below the stretch panel and should open as flap for easy maintenance under chassis from both side of the bus. The side skirt shall be able to withstand the side impact as per the provisions of BIS: 14682-1999 or latest. Similarly, the rear end shall be able to withstand the rear impact as per the provisions of BIS: 14812-2000 or latest. Side Under Run protection as per CMVR will have to be provided.

14.3. Anti-drumming compound or High-Pressure Laminate (HPS) shall be applied

on inner side (enclosed surfaces) of entire panelling.

14.4. Roof structure shall be thermally insulated with flame retardant Polyurethane or glass wool of minimum 40 kg/m3 density. The bidder shall provide specifications / BIS standards for the aforesaid insulating material.

14.5. Rain gutters shall be provided to prevent water flowing from the roof onto the passenger doors, driver's side window, and exterior mirrors. When the bus is decelerated, the gutters shall not drain onto the windshield, or driver's side window, or into the door boarding area. Cross sections of the gutters shall be adequate for proper operation considering rain conditions stipulated in clause 2.7 of this schedule. Provision shall be made to prevent roof water draining on front windscreen in the event of panic / sudden braking.

14.6. Entire front end of the bus shall be sealed to prevent debris accumulation behind the dash board and to prevent driver's feet from kicking or fouling wiring and other equipment. Front end shall be free of protrusions that could be hazardous to passengers standing or walking in front of the bus. Compliance to with AIS 052 / IS: 13942 - 1994, for external projections shall be established.

14.7. Interior panelling (sides and roof) shall be PVC coated GI Sheet and. attached so that there are no exposed unfinished or rough edges or rough surfaces. Panels & fasteners shall not be easily removable by passengers. Heads of Fasteners shall be installed preferably flush to the panels. The requirements of interior fittings shall be in accordance with AIS-047, as notified under CMV Rule 124.

14.8. The skirt panel shall be openable fitted with stainless steel piano type hinges (heavy duty), to be fitted at the rub rail for the ease of maintenance purpose. However, the fixed skirt panel may not be in openable position like at wheel arches. The openable skirt panels shall be bolted at skirt level.

15.0 Paints

15.1. All the structural members of the bus shall be treated for corrosion prevention internally as well as externally and painted wherever required. The Polyurethane (PU) painting conforming to BIS: 13213-1991 or latest shall be used for exteriors painting of the bus including interiors wherever required. Colour shade shall match to the shades as per BIS: 5-1978 or latest. In case of Matt black paint, the same shall be tested as per IS: 13213-1991 or latest except the gloss value should be up to 30 units.

15.2. All exterior surfaces shall be smooth & free of wrinkles & dents. Finished painted surface of the bus should be free from the following imperfections:

a. Blisters or bubbles appearing in the topcoat film.
b. Chips, scratches, or gouges of the surface finish.
c. Cracks in the paint film.
d. Craters where paint failed to cover due to surface contamination.
e. Overspray.

f. Peeling.
g. Runs or sags from excessive flow and failure to adhere uniformly to the surface.
h. Chemical stains and water spots.
i. Dirt particles embedded in the paint.

16.0 Colour Schemes

Exterior, interior colour schemes and logo / graphics to be applied shall be as notified by MTC Chennai. The buses shall be recognizable as environmentally friendly ReESS buses with an appropriate Logo.

17.0 Service doors

17.1. Two fully automated service doors (Entrance & Exit wide clear aperture (without flaps) shall be fitted at front and rearside of the bus as per provisions of the AIS 052 (Bus Code) for Type I, SDX category.

17.2. Front door shall be located ahead of front axle whereas rear door shall be positioned such that rear edge of gate as per CMVR .

17.3. The entrance and exit doors shall be electro-pneumatically controlled / (suitably Automated) by the driver and / or the conductor with internal and external controls for emergency opening. In the event of an emergency, it shall be possible to open the doors manually from inside as well from outside the bus after deactivating pneumatic controls of each door with a force at door handle not more than 10 kg. All door components, latches, locks and door hinges shall be as per AIS 052 Bus Code.

17.4. An emergency switch shall be provided on dashboard, that when actuated shall open both the service door simultaneously with audio visual alarm through flashing red light in passenger saloon roof and siren hooter on both decks to announce emergency situation and need of evacuation.

17.5. Safety provisions as mentioned in Bus code for automated Section 3.4 of AIS 052. Anti-pinching feature shall be provided so as to avoid trapping of passenger during closing of door. Additionally, actuation of automated door under normal conditions shall not be possible when Bus is in motion.

17.6. An audio-visual signal shall be provided at the service doors for the convenience of passengers that shall be affected during the door opening and closing cycle and for the entire duration of door in open condition. A suitable indication system shall be provided on driver's dashboard to warn that the door is 'Open' or not fully closed. A red "DOOR CLOSING" sign shall be installed above exit door. The sign will blink when exit door is closing. Further, unless all the service doors are in fully closed position bus shall not be able to be put into motion using its own power. A suitable device to prevent the exit door from opening as long as the bus is in motion shall be provided.

17.7. The provision of automatic actuation of closing cycle shall be made with suitable settable time lag (typically 8 – 10 sec.) when there is no movement of passengers through the doors. This feature shall have manual override by

driver only.

17.8. Service doors shall be provided with grab handles as per AIS 052.

17.9. All footsteps and exits (both service and emergency) shall be provided with anti-skid yellow nosing.

17.10. Both the entrance and the exit doors shall be of inside swing type or double jack knife type.

17.11. Service Doors operation shall be controlled with the help of three self-illuminated push buttons or switch:

- One green button for entrance (press once open, press again closed)
- One black button for exit (press once open, press again closed)
- One red master button to close both entrance and exit doors at the same time

17.12. Foot step lighting: Suitable lighting source shall be provided that shall get actuated upon switching on headlights and door opened condition. It shall provide adequate ground illumination next to service doors for the minimum distance of 1000 mm from the edge of foot step. Suitable lighting shall be provided in the intercommunication staircase.

17.13. Access door shall be provided with heavy-duty sealing to avoid reduce and minimize ingress of rain, heat & dust into the passenger compartment. The upper & lower section of both front & rear doors shall be glassed for no less than 45% of the respective door opening area of each Section. The glazing material & glass in the front & rear doors shall be the same as in the side windows.

18.0 Steps

Dimensional requirements of steps inside the bus shall be as per Bus Code (AIS 052). Steps shall be provided with antiskid surface

19.0 Intercommunication stair case

Intercommunication staircase One intercommunication staircase from boarding platform to upper deck and One half staircase from lower deck to upper deck complying with provisions of AIS 139.

Guarding of Step wells for upper deck

On the upper deck of the bus, the intercommunication staircase well shall be protected by an enclosed guard having a minimum height of 800 mm measured from the floor. The lower edge of the guard shall not be more than 100 mm from the floor.

The front windscreen ahead of passengers occupying upper deck front seats of a double-deck vehicle shall be provided with a padded guard. The higher edge of that protection shall be situated vertically between 800 mm and 900

mm above the floor where the passenger's feet rest.

The riser of each step in an intercommunication staircase of a Double Deck vehicle shall be closed.

20.0 Guard/ Guard Rails

Where seated passengers are likely to be thrown into service doors entrance, exit or any other passenger saloon area as a result of heavy braking, suitable guard shall be provided. The guard height shall be minimum 800 mm from the floor, and the guard shall extend inward from the wall at least 100 mm more than the centre line of the seating position of the passengers who are prone to this risk. The guarding shall be as per the provisions of the Bus Code. Wherever, such guard / guard rails can't be provided **due to some design / layout constraints**, lap type seat belt shall be provided. The guard rails and handholds in intercommunication staircase areas shall comply with provisions of AIS 139.

21.0 Windows

For window and other glasses, it shall be tinted and toughened safety glasses as per IS 2553 (Part-2)–1992 / latest of 4.8-5.3 mm thickness and comply with provisions of AIS 052 Bus Code and AIS 139. The windows shall be **single piece fixed glass type design**. The size and shape of the glasses shall enable even the standees to have maximum outside view without kneeling and shall comply with AIS 052. Windows shall have provision of suitable sealing to avoid ingress of dust and water. Window fitted shall be type approved as per AIS 068.

22.0 Emergency Exit

22.1. Emergency exits shall be provided in the bus as per the provisions of the Bus Code AIS 052, AIS 139 and CMVR.

22.2. Total number emergency doors/ exit/ aperture shall be minimum as per the Bus Code AIS 052, AIS 139.

22.3. At least one emergency exit of size 1250 x 550 mm shall be provided on opposite side of the of the service door.

22.4. At least one escape roof hatch having inscribed area of 70 x 50 cm shall be provided as an emergency exit.

22.5. The Bidder shall also provide one additional window capable of ejecting / opening from inside for emergency exit or one breakable window on right hand side in addition to minimum two numbers of emergency exits as per the Bus Code/ CMVR. These windows shall be marked as Emergency Exit in red and shall be provided with glass breaking hammer secured on the frame of the window

22.6. For emergency exit purpose, service doors equipped with power operated system shall be provided with mechanism to be readily deactivate and door

opened by hand from both inside and outside the passenger compartment.

23.0 Floor

23.1. The floor level of bus shall be at a maximum height as per CMVR. The floor design shall allow easy cleaning including that sweeping & drainage of water.

23.2. To take into account passenger load Floor shall be constructed with 18 / 19 mm thickness phenolic resin bonded densified laminated compressed wooden floor board (both side plain surface) having density of 1.2 gm/cc conforming to IS 3513 (Part-3): type VI 1989 or latest. The flooring should also be boiling water resistant as for marine board IS 710-1976 / latest and fire retardant as per IS 5509-2000 (IS 15061:2002). The floor shall be coated with Anti-skid material of 3 mm thick anti-skid type silicon grains ISO: 877/76 for colour, IS: 5509 / 15061 for fire retardancy.

23.3. There shall not be any protrusions in the passenger movement area that may cause injury.

24.0 Gangways

The gangway shall be as per the provisions of the AIS 139 and shall meet the statutory requirements. Minimum interior head room at the center line of gangway shall be 1800 mm for lower deck and 1680 mm for upper deck..

25.0 Handrails and Handholds

The offered bus shall comply with provisions of AIS 052 and AIS 139 with respect to hand rails and handholds. Adequate number of handrails and handholds (strap hangers) shall be provided as per provision of bus code to cover entire area identified as standee area only on lower deck. The surface of handrails & handholds shall be slip-resistant. Depending upon the size of the bay (i.e. between two consecutive roof hand rail brackets), minimum 2 to 4 numbers handholds per bay shall be provided so that every standee passenger is able to grab a hand hold. Hand holds shall comply with AIS 046.

Hand holds for seated passengers shall be provided as mentioned in Cl. 24.0 of this schedule, at back of every seat. For those seating positions where these handholds can’t be ergonomically accessible to the intended purpose, suitable alternate effective arrangement shall be made to avoid throwing off the passenger in the event of panic braking.

Handrails shall have a colour that sets them into contrast to the background. The covering of the handrails shall remain high quality during the whole lifetime of the buses.

26.0 Escape Hatch

In addition to emergency exits, at least two no. of Escape hatches shall be provided as per the AIS 052. One in front portion and one in the rear position.

Both these hatches shall have electrically operated fans. The one mounted in the front portion of roof shall be sucking the fresh air in the passenger compartment, while the one fitted at the rear shall be expelling the compartment air to outside atmosphere, thus creating forced ventilation across the passenger compartment. This system shall be automatically controlled through control system for Air conditioning and ventilation. It shall be put ON in the event of failure of Air Conditioning system when the bus is running / under operation.

27.0 Stanchions and stop-request chimes

Vertical stanchions shall be so positioned to facilitate access to seats for those standing. The stanchions shall comply with UBS II spec with tubing with PVC sleeve or powder coated. Each stanchion shall be provided with buzzer switch at the height of 1200 mm for the convenience of passengers to announce their wish to alight the bus. Sufficiently audible electronic type Stop Chimes shall be provided in the bus, one in driver's compartment & one near exit door. The interval between chimes shall be 3 to 4 seconds. In addition**,** a red pilot light shall also be provided on driver's dashboard when the bell push is pressed.

Stop request switch shall be provided on alternate stanchion on both left and right side alternatively on both decks.

28.0 Passenger Seats

28.1. The seats (design, spacing and sizing) and its anchorages shall comply AIS 052 Bus code specification for Semi DLX type and AIS 023. The passenger seats preferably should be front facing, (in case rear facing seats are provided, suitable head restraint complying applicable AIS standard.) comfortable, durable & maintenance free of 'PP-LD' (Polypropylene Low Density) / LDPE moulded construction meeting the performance requirements of AIS 023 and other requirements as per the Bus Code. The PP-LD / LDPE moulded seat shall be appropriately fitted with moulded flame-retardant Polyurethane (PU) cushion for seat & back rest as per Bus Code. The seats shall be upholstered with waterproof expanded vinyl coated fabric to match the seat & interior décor conforming to IS 8698 of Class-A, Grade-I, Type-A. Suitable integral type seat hand grab rails shall be provided, one on top of backrest & one at the back of backrest, for seated passengers. However, the seat pitch shall be maintained at 680 mm (minimum). A hand rest shall be provided to the gangway side of passenger seats on isle side.

28.2. The free height over seating position for upper deck shall be 850 mm. as per AIS 139.

28.3. There shall be four seats for senior citizens & four priority seats for Differently Abled person in the area provided in front on Driver side of the bus. One seat behind the driver seat shall be reserved for Blind person. However, the final reservation of seats for the same shall be finalized by MTC Chennai at the time of proto- Approval.

28.4. The seating lay out should be in 2x2 layouts meeting the bus code

requirements.

29.0 Seat Belts and its Anchorages

Seat belts shall be provided for the seats as per the provisions of CMVR & the Bus Code. Seat, Seat belts and its anchorages shall conform to the requirements of AIS 023, AIS 005 and AIS 015. It is applicable for driver seat only.

30.0 Driver's Work Area

30.1. A driver door of not less than 1600 mm height and 650 mm wide, with maximum space for sliding window using the material like glazing & glass as used in the other side window glasses, shall be provided for entry and exit to driver's work area. The hand holds, steps and all other requirements of driver's work area shall be as per the provisions of the AIS 052 Bus Code. The driver's work area shall have a light to provide general illumination and it shall illuminate the half of the steering wheel nearest to the driver. Foot control angles shall be determined from a horizontal plane regardless of the slope of the cab floor and shall comply with AIS 035. Specific attention shall be provided to this driver's work area to provide pleasing and healthy working atmosphere / conditions, minimize work load and operational fatigue through automation and ergonomic design. The Driver's compartment shall be fitted with a 24 V DC, 200 mm dia. fan at proper height on side wall or provided with AC duct outlet to provide adequate fresh air ventilation.

30.2. Driver's seat- The Driver's seat with head restraint shall meet the requirements of AIS 023. The seat shall be adjustable in vertical and longitudinal axes with a provision of adjustment of Torso and seat angle. The seat shall have pneumatic suspension for ride comfort.

30.3. Driver partition- The Driver partition shall be provided as per the AIS 052 Bus Code. The partition glass shall be tinted to minimize the glare & reflection in the windscreen directly in front of the barrier from interior light during night operation.

30.4. Driver's Barrier assembly - A Driver's Barrier assembly shall be fitted in driver's cab. The manually operated driver barrier assembly shall be provided before the front Exit door for the protection of the passenger standing near the gate in the gangway of the driver cab. The driver shall be able to operate the barrier assembly easily while sitting.

31.0 Dashboard Instrumentation and Control System

31.1. The bus shall have aesthetically and ergonomically designed dash board and instrument panels moulded in suitable polymeric material. All the dashboard controls and instrumentation system shall be as per the bus code. All controls that are manually operated shall be on right side on Instrumentation Panel. Controls should have self-illumination for night time operations. The bus shall have dash board with full instrumentation panel containing meters and gauges to indicate important parameters like air pressure in brake tanks,

coolant temperature, ReESS charging current, Vehicle overload signal, all tale tells, side indicators, head lights, hand brakes, Service door control and its status, high cooling system temperature & low coolant level, low air pressure, ReESS SOC, applicable OBD 2 diagnostics, shall be provided at the driver's dash board.

31.2. There should also be provision for inter lock between door exit / entry door open and vehicle move moment i.e. vehicle should not move if any of the doors including Driver's door is open. The illumination of the self-lighted symbols shall be adequate to be easily seen during day time ambient light in the driver's compartment. All essential visual portion of Dash board showing information and diagnostics required for normal driving shall be visible when seen from eye ellipses of 50th percentile mannequin placed at R point of driver's seat. Reference of AIS 011 shall be taken for location of eye ellipses.

32.0 Rear-view Mirrors - Interior and Exterior

32.1. Rear-view mirrors shall be provided on both sides of the bus to enable driver to have clear side/rear views. One interior rear-view mirror shall also be fitted for viewing passenger saloon area including central / rear door by the driver. Installation and performance requirements of the rear-view mirrors shall conform to AIS 001 and AIS 002. Additionally, front bumper-vision mirror shall be provided to cover whole front bumper and area around left side "A" pillar.

32.2. Reverse parking camera associated with Visual Display Unit (VDU) of size 200 mm minimum mounted on or near Instrumental Panel and Reverse Park Assist System (RPASS) shall be provided complying with AIS 145. The RPASS and Reverse camera and its VDU shall get activated only upon engagement of reverse gear. It shall give audio-Visual alarm on reaching the critical distance from obstacles while reverse parking.

32.3. A reverse buzzer with sound level more than ambient sound level of typical city road environment shall be installed at the rear of the bus to sound intermittently when reverse mechanism is activated.

33.0 Sun Visor

Adjustable sun visors shall be provided for the windshield & the driver's side window. Visors shall be shaped to minimize light leakage between the visors & windshield. Visors adjustment shall be made easily by hand with positive locking & releasing devices and shall not be subject to damage by overtightening. Sun Visor on window shall not obstruct viewing of rear vision rear view mirror. Sun visor construction & material shall be strong enough to resist breakage during adjustment. Visors wherever deployed shall be effective in the driver's field of view at angles of more than 5° above horizontal.

34.0 Destination Boards and Public Information System

34.1. Alphanumeric Dual Display Technology Amber colour LED based electronic route display system in English and Tamil of high intensity illumination with automatic brightness control shall be installed at the front, rear and side of

bus with GPS feed triggered display on internal display board and announcement of name of approaching bus-stop inside the bus. Destination boards should comply with IS 16490 BIS standards and the certificate of compliance should be produced at the time of inspection of prototype from approved test agency under CMVR. Detailed compliance to specifications contained in IS 16490:2016 with latest Amendments--LED Destination Board System for Buses – Specifications has to be adhered to.

34.2. The inside display board shall be provided behind the driver's partition on lower deck and on front wall of upper deck. The system should be compatible with GPS. Fitment of destination boards shall be as per clause 2.2.15 of AIS 052 (Revision 1) in terms of requirements under AIS 153.

34.3. The compliance of regulatory standard as per AIS-052 (As applicable on date of manufacturer) – Code of Practice for Bus Body Design and Approval. Clause 2.2.15.3, Clause 2.2.25.1, shall be duly ensured.

34.4. The display of text at front, rear and side destination boards should be possible in fixed, scrolling & alternate mode type in Tamil & English alternatively along with fixed route number in Tamil and Arabic numerals. Simultaneously the route number and destinations shall be announced so as to make audible to the passengers on the bus stop in Tamil and English language alternatively. Loudspeakers integrated with the display system be fitted one at the front gate and another speaker at the rear gate especially for the persons with disabilities. The destination boards shall be compatible with Global Positioning System (GPS).

34.5. The inside display board shall be fitted just behind the driver partition on lower deck and on front wall of upper deck. There shall be display of name of approaching bus stops in Tamil and English alternatively with announcement system. The system should be able to store on board up to 100 messages of 50 characters each on an average. The messages should be capable of rolling, flashing (fully or selectively) in Tamil / English symbols as per pre-programmed system. The message shall be visible to the all passengers standing/ sitting at the last seat of the bus. The illumination system will be of module display type. Present and next stops details shall be highlighted with flashing in modern commuter-friendly in Amber colour. The system shall be GPS compatible and should be able to display information of pre-recorded names of approaching bus stops in auto mode activated through GPS feed through port in controller on open standard protocol. The display system shall have the provision of flashing / highlighting information in pre-programmed mode and through an intervention by the driver / conductor. A noise free integrated voice announcement system with settable and adequate sound volume so as to be heard by the bus commuters shall be fitted - one at the front (behind the driver along with LED display) and one at the rear side-inside on lower deck and one at the front along with LED display on the upper deck.

34.6. The system shall have a programming for minimum 150 numbers of routes and 300 numbers of destinations. Further the system shall also have a programming for minimum 150 nos. of bus stop on each route. There shall be provision for feeding more destinations options against one route number.

The operation of the system by the drivers shall be made on the dashboard or near to it. There shall be single point near dashboard for changing program. The details of the memory, circuit wiring diagram, power consumption etc. shall be provided by the Bidder. The Operator shall impart detailed training to the officials / drivers with respect to programming, operation/ maintenance etc. of display system.

34.7. The updating of route master and sound files with indexing should be possible through transmission from control room over the air using GPRS and through additional port in the controller as well.

35.0 Towing Device

The bus shall have heavy-duty ring type towing devices in the front bumpers area with load transfer to bus structural members. The capacity of each towing device shall be 1.2 times (minimum) the kerb weight of the bus within 30 degrees in both lateral and vertical directions of the longitudinal axis of the bus.

36.0 Wind screen – Front and Rear and Window Glasses

Windscreen glasses shall meet the requirements of BIS 2553: Part II-1992 or latest and that of CMVR and Bus code. The glazing used for fitment of glasses shall be Ethylene Propylene Dien Monomer (EPDM) rubber of black colour and appropriate adhesive material. Optionally windscreen may be pasted with suitable adhesive. The front windscreen shall be curved, single piece laminated safety glass and provided with demisting feature / system. Rear windscreen shall be single piece toughened flat or curved glass. For window and other glasses, it shall be tinted and toughened safety glasses as per IS 2553 (Part-2) –1992 or latest of 4.8-5.3 mm thickness and AIS 052 Bus Code.

37.0 Wind Screen Washing, Wiping System and Demisting System

The windscreen washing and wiping system shall be in accordance with CMVR / IS: 7827 Part 1, 2, 3 (section 1, 2) or latest and comply with AIS 011.

A high output two speed demister shall also be fitted in the driver's cabin to draw fresh air from front facia.

38.0 Fire Extinguishers

In addition to FDSS three (3) numbers of multipurpose duly filled fire extinguishers of total capacity of 15 kg minimum conforming to BIS: 13849-1993 or latest, for dousing of fire caused in the bus by any of the sub-systems / any other causes including but not limited to that in ReESS (traction and or others), of capacity and quantity as per the provisions of GSR-853 (E) dated 19.11.2001 notification of Government of India, shall be provided as per the Bus Code, one each in passenger compartment of upper and lower deck and one in driver’s work area. Fire extinguishers shall be encased & fitted with proper reinforcement. The enclosure box shall have transparent breakable glass at front cover. Glass breaking hammer shall be provided with each encased cylinder.

39.0 First Aid Kit

First aid kit complete with items, medicines, bandages etc. shall be provided as per the provisions of CMVR. The kit shall be fitted near driver seat at appropriate position.

40.0

41.0 Bus Dimensions

Sr. No.	Description	Double Decker Air-Conditioned Bus
1.	Overall length -	9.0 m to 10.5 m
2.	Overall width - Nominal	Maximum 2600 mm
3.	Overall height	As per CMVR
4.	Wheel base - Nominal	4800-6000 mm
5.	Ground clearances within the wheelbase	Within the wheelbase not less than 240mm. As per CMVR
6.	Ground clearance at axle	Minimum 130 mm
7.	Wheel area clearance(mm)	As per OEM Design
8.	Floor height at service doors at curb weight	Maximum 900 mm
9.	Front overhang	As per CMVR
10.	Rear overhang	As per CMVR
11.	Turning clearance radius	As per IS-9435 and IS-12222 As per CMVR
12.	Ramp over angle	As per IS:12218
13.	Departure Angle	As per IS:12218
14.	Approach angle	As per IS:12218
15.	Seating capacity	Total No. of passengers 66 with 2 x 2 with seating layout No. of standee shall be declared by Vehicle manufacturer based on the floor space available for that purpose on lower deck. **r**ef. Bus code AIS 052
16.	Gross Vehicle weight GVW)	Manufacturer's declaration should not exceed sum of allowable axle loads as per CMVR
17.	Angles	Angle of approach (unladen) not less than 8. 0°; angle of departure (unladen) not less than 9° and ramp over angle (half of break-over angle) not less than 4.8^{o}.

42.0 24 VDC Battery / power supply system for auxiliary systems/aggregates of bus

42.1. The vehicle Battery system shall be 24 VDC (nominal) having minimum 150 Amps-hour capacity, low maintenance type batteries. The batteries shall be well secured to a hinged / pivoted or slide out type carrier for ease of access for repair & maintenance, replacement and suitably ventilated for escape of fumes but insulated against ingress of dust and moisture. Performance requirements of the batteries shall conform to BIS: 7372-1995 (or latest) / IS 14257 – 1995 (or latest).

42.2. Battery terminals with positive locking system (e.g. angle type terminal with provision for double bolting) duly protected against all possible short circuit risk shall be provided.

42.3. Each battery cable shall be covered with flame retardant corrugated flexible pipe and shall be properly encased & clamped.

42.4. A relay controlled heavy-duty battery cut-off switch shall be provided near the driver seat on side panelling at appropriate level for disconnecting the power supply from the battery except for safety devices such as fire suppression system & other systems as specified. The battery cut-off switch with the power plant operating, shall not damage any components of the electrical system in off position. The battery cut-off switch shall be capable of carrying & interrupting the total circuit load. A heavy duty cut off switch shall also be provided in the battery compartment capable of isolating all electrical circuits.

42.5. The bus shall have 24 VDC double pole wiring for all its low voltage electrical equipment except in unavoidable circumstances. A separate system/ mechanism shall be provided for the discharge of electro static charge induced during the operation of vehicle. Appropriate precautions shall be taken in case of single pole wiring to avoid spark in sub-assemblies.

42.6. A DC/DC converter connected to the high voltage DC-link with an adequate capacity shall be provided for the charging of the 24 VDC-battery.

43.0 24 VDC Electrical equipment and wiring

43.1. The bus shall have 24 Volt D.C with multiplex wiring system for all its electrical equipments except in unavoidable circumstances to avoid sparking in buses. A separate system / mechanism shall be provided for discharge of electrostatic charge induced during the operation of vehicle. Adequate precaution shall be taken in case of single pole wiring to avoid spark in any of the items etc.

43.2. An adequate capacity power supply system / source of 24V DC, minimum 150 Ah rating with consistent output to take care of high idling periods of city operation shall be provided and so located as to minimise ingress of oil or rain water into it.

43.3. Electrical equipment and wiring shall conform to Indian/ international Standards, bus code and UBS II. All cabling shall be as per provisions of Bus

code / UBS II. The wiring shall be multiplex system as per AIS 153, flame proof, ISI marked conforming to BIS: 2465-1984 or latest. As far as possible electrical system shall be 24V double pole multiplex wiring system except in unavoidable condition. However, in case of single pole wiring all power & ground wiring shall have double electrical insulation, which shall be waterproof conforming to the Indian / International Standards. Wiring shall be grouped, numbered & colour coded. Wiring harnesses shall not contain wires of different voltage classes unless all wires within the harness or insulated for highest voltage present in harness. Kinking, grounding at multiple points, stretching & exceeding minimum bend radius shall be prevented.

43.4. Wiring looms / harness for electrical system of bus shall be properly routed, encased / concealed type so mounted to eliminate chances of any spark. Details of above wiring loom including circuit diagram; layout of controls etc. shall be supplied by the bidder along with the bid. Wiring support shall be protective & non-conducting at areas of wire contact & shall not be damaged by heat, water, solvents or chafing.

43.5. All electrical fittings and lights shall be fully wired up, running in flame retardant black colour PVC sleeves as per applicable Indian Standards (to be specified by the manufacturer) and installed in a manner to facilitate easy inspection / rectification / replacement etc. as & when required without disturbing internal finish / décor of the bus. Whenever any wire or cable or PVC sleeve carrying cable etc. passes through holes in sheet metals / structural member, suitable rubber grommets / Bakelite inserts shall be provided in these holes to avoid direct contact between cables and sheet metal causing damage to insulation coating. Wiring should be of multiplexing type with double insulation. The lay out and compliance to standards should be as prescribed in CMVR.

43.6. Design of electrical, electronic & data communication systems shall be modular so that each major component, apparatus panel or wiring bundle is easily separable with Standard hand tools or by means of connectors. Each module except main body wiring harness shall be removable & replaceable. Power Plant wiring shall be an independent wiring module. Replacement of power plant compartment wiring module shall not require pulling wires through any bulkhead or removing any terminals from the wires.

43.7. Electrical system & its electronic components shall be capable of operating in area of the vehicle in which they will be installed. Electrical & electronic equipments shall not be located in an environment that will reduce performance or shorten life of the component or electrical system. No vehicle component shall generate or be affected by electro-magnetic interference or radio frequency interference (EMI / RFI) that can disturb performance of electrical / electronic equipments.

43.8. Bus manufacturer shall furnish recommendations regarding methods to prevent damage from voltage spikes generated from welding, jumps start shorts etc.

43.9. All electrical & electronics hardware shall be accessible & replaceable easily.

It shall be mounted on an insulating panel to facilitate replacement. Mounting of hardware shall not be used to provide sole source ground and all hardware shall be isolated from potential EMI / RFI.

43.10. All electrical / electronic hardware mounted on exterior of bus i.e. not designed to be installed in an exposed environment shall be mounted in a sealed enclosure.

43.11. All electrical / electronic hardware mounted in the interior of the bus shall be inaccessible to passengers & hidden from view unless intended to be viewed.

43.12. All electrical / electronic hardware & its mountings shall comply with the shock & vibration requirements.

43.13. Electric supply systems over voltage output protection shall be provided.

43.14. All branch circuits shall be protected by circuit breakers or fuses sized to requirements of the load. Circuit breakers or fuses shall be sized to larger than total circuit load current as per UBS II. Current rating for wire used for each circuit must exceed size of circuit protection being used.

43.15. All branch circuits except battery to starting motor & battery to generator / alternator circuits shall be protected by circuit breakers or fuses sized to the requirements of the load. Circuit breakers or fuses shall be sized to a minimum of 15% larger than the total circuit load current. The current rating for the wire used for each circuit shall exceed the size of the circuit protection being used.

43.16. Electronic Circuit protection for power supply for starting mechanism / device if any shall be provided to prevent engaging of for long time / to prevent overheating.

43.17. All electrical motors and other traction drives / subsystems shall be easily accessible for servicing.

43.18. To the extent practicable, wiring shall not be located in environmentally exposed locations under the vehicle. Wiring & electrical equipment necessarily located under the vehicle shall be insulated from water, heat, corrosion & mechanical damage. Where feasible front to rear electrical harnesses should be installed above the window line of the vehicle.

43.19. All electronic components / equipment shall have self-protecting capability in event of short circuit in cabling and also in over voltage and reverse polarity conditions. If an electronic component is required to interface with other components it shall not require external pull up and / or pull-down resisters.

43.20. Two separate additional out-lets are to be provided with appropriate relays & fuses in wiring harness for fitment of electrical auxiliary devices/ systems to be added later on in the buses, if required.

43.21. Minimum two DC (Direct Current) out-lets of 24V, and one 220 AC out let shall be provided at suitable location for charging of electrical/electronic equipment like Electronic Ticketing M/c, other Electronic/Electrical equipments etc.

43.22. USB ports for charging mobile phones shall be provided on both side walls at all seat positions, conductor seat, driver's seat and at priority seats on both decks.

43.23. If any electronic components have internal clocks, they shall have their own battery back up to monitor time when main battery power is disconnected.

43.24. RF components such as global positioning system (GPS) etc. whenever provided shall use coaxial cable to carry the signal. The RF systems require special design consideration for losses along the cable. Connectors shall be minimized, since each connector & crimp has a loss, which shall contribute to attenuation of the signal. Cabling should allow for the removal of antennas or attached electronics without removing the installed cable between them.

43.25. All electric / electronic systems shall have protection against reverse polarity. Certificate of compliance for reverse polarity to be furnished at the time of prototype approval.

44.0 Conductor Stop request Buzzer

An electric buzzer shall be provided in the driver's cab along with audio-visual indication on Driver's Instrument panel. The buzzer's switch shall be provided near the rear door at an appropriate location for easy operation by the conductor.

45.0 Conspicuity

A retro-reflective tape complying with AIS 90 specifications for Conspicuity shall be pasted on the vehicle. In front it shall be of white colour, on side of the vehicle it shall have white or yellow colour and in the rear of the vehicle it shall be of red colour. The tape and make has to be type approved.

46.0 Fog Lamps

The bus shall be fitted with fog lamps at both front and rear as prescribed in CMVR**.** Fog lamps shall be Type approved as per applicable AIS 012 and installed as per AIS 008.

47.0 Lights, Lighting and Light signalling Systems

47.1. Interior saloon and intercommunication stairways lighting system shall have LED light panel providing minimum light intensity of 50 lux measured at seat level and mounted in two separate circuits in staggered formation for uniform lighting for each circuit. Wiring should be of multiplexing type with double insulation and fire-retardant type. All lighting to be of LED type only.

47.2. Headlamps fully conforming to CMVR requirements including fitment of head levelling device with relay and side light etc. shall be suitably styled into front-

end construction. All lighting and light signalling devices, its fitment and performance shall comply with requirements of CMVR and/or AIS 052 Bus Code.

47.3. White and Red height marker lights shall be fitted at both top side corners of the front and rear panel of the bus respectively.

47.4. Side Indicator, Brake, Reverse & parking light shall be fitted as per CMVR. Side markers shall be provided on both sides as per bus code / AIS 008

47.5. All the lights, their wattage and lighting systems shall conform to the requirements of Bus code, CMVR and other relevant AIS standards and shall be arranged aesthetically.

47.6. Lights shall be provided for illuminating exit / entrance door area. These lights shall illuminate the outside area up to at least one meter when door / doors is / are opened. Lights shall be automatically switched off when the door is closed. The lights for exit/entrance door areas shall be flushed as far as possible. Protrusions (if any) shall conform to relevant CMVR/ AIS Standards.

47.7. A well-lighted bus registration number plate shall be fitted at rear as per the provisions of CMVR.

47.8. Switches shall be fitted on the right-hand side of the instrument panel through evenly loaded circuits & fuses as per the bus code.

48.0 Provisions for Advertisement Card Holders / Exterior Advertisement Friendly Design

The bus should have a provision for replaceable ‘Coving Panels’ (PVC panels) for advertisements on both sides of the bus. These panels of suitable size should be able to be inserted in a bracket matching with the bus contours fixed above window frame and below roof sealing. The maximum number of panels as could be accommodated along the length shall be provided.

49.0 Interior Noise and pass by noise

Interior noise shall not be more than 72 Db (A) when tested as per AIS 020 and pass by noise requirements as per CPCB/CMVR when tested as per IS 3028: 1998 or latest rev. Type Approval testing and certificate by the test agency under CMV Rule 126 shall be produced at the time of prototype approval. The pass by noise of the vehicle shall confirm to CMVR requirements when tested as per BIS: 3028:1998.

50.0 Rain simulation testing

All production including prototype buses shall undergo and comply rain simulation test (Shower testing) as per IS: 11865. Additionally, provision shall be made to expose underbody portion of the Bus to simulate splash by providing nozzles suitably to expose underbody area.

51.0 Water wading Testing

The prototype shall be tested for water wading with the water height of 350 mm minimum for floor heights of 400 mm. The test shall be carried out with ReESS with minimum SOC of 80% for the minimum time duration of 15 Minutes. The prototype Bus shall be driven through the water wading test track to and fro (Forward and Reverse) at the vehicle speed of 10 kmph. Acceptance criteria as per AIS 038.

52.0 EMI and EMC

The fully built bus shall comply with CMVR / AIS 004 (Part 1 and 2). Type Approval testing and certificate by the test agency under CMV Rule 126 shall be produced at the time of prototype approval.

53.0 Electric Horn

An electric horn conforming to BIS: 1884-1993 or latest and installation requirements conforming to AIS 014 shall be fitted in the bus.

54.0 Intelligent Transport System (ITS)

The Buses to be fitted with CCTV, GPS / any other ITS devices as per IS 16833. Further, the Display system should be compatible with the ITS.

1) Passenger Information System (PIS) - LED based Display Boards and Speaker System for announcement (There shall be five PIS boards one each at outside Front, Rear & side and inside the Bus at both floor decks)
2) Passenger Surveillance Cameras
3) GPS / GPRS based Vehicle Tracking / Controller Unit, Basic Driver Console and Driver Feedback System – complying to IS 16833;
4) Panic Alarm;
5) Pole Mounted Validators to be fitted at Entry and Exit on Buses for smart card ticketing;
6) Automatic Vehicle Location System (AVLS);
7) Integration with Command Control Centre as per the requirement of the Authority in near future.

54.1. Passenger Information System

Electronic route destination display system:

Alphanumeric Dual Display Technology coloured LED based electronic route display system of high intensity illumination with automatic brightness control along with audio-video display system in English and Tamil shall be installed at the front and side of bus as per the following details.

Front Destination Board

There shall be a display of destination with options in Tamil & English along with route numbers. The display system shall be accommodated within the minimum size specified in the bus code. The display should be fixed type. The pitch of the LEDs shall be optimized to cover the maximum possible area

along the length for displaying the maximum number of letters. The display shall be clearly visible in all weathers at a distance of up to 50 metres.

Side Destination Board

There shall be a scrolling display of destination in Tamil & English alternating with fixed route numbers. Simultaneously, the route number and destination shall be announced so as to be audible to the passengers at the bus stop. The system shall be operated with in-built software for the above purposes, to enable the driver to change the destination when needed. Exterior loudspeakers integrated and synchronized with the display system be fitted, one at the front door and another speaker at the rear door. The display system shall be accommodated within the minimum size specified in the bus code. The pitch of the LEDs shall be optimized to cover the maximum possible area along the length for displaying maximum number of letters. The audio messages and the video display shall be clearly audible/ visible in all weathers at a distance of up to 5 metres.

Rear Destination Board

There shall be a scrolling display of destination in Tamil & English alternating with fixed route numbers. Simultaneously, the route number and destination shall be announced so as to be audible to the passengers at the bus stop. The system shall be operated with in-built software for the above purposes, to enable the driver to change the destination when needed. Exterior loudspeakers integrated and synchronised with the display system be fitted, one at the front door and another speaker at the rear door. The display system shall be accommodated within the minimum size specified in the bus code. The pitch of the LEDs shall be optimized to cover the maximum possible area along the length for displaying maximum number of letters. The audio messages and the video display shall be clearly audible/ visible in all weathers at a distance of up to 5 metres.

Inside Display Board (behind the driver partition in lower deck and front panel of upper deck)

There shall be display of the name of approaching bus stops in Tamil & English alternatively, duly synchronized with announcement system. The system shall be operated with in-built software for above purpose with provision available for driver to trigger the display for each stop. The system should be able to store on-board up to a minimum of 100 messages, of 50 characters each on an average. The messages should be capable of rolling, flashing (fully or selectively) in Tamil / English / symbols as per pre-programmed system. The message shall be visible to all the passengers standing / sitting up to the last seat of the bus. The micro-processor-based announcement shall be made for both current and next bus stop / destination synchronized with the display alternatively in Tamil and English. The illumination system will be of modular display type. The display panel shall have multiple rows for higher coverage. The display shall be mounted behind the driver for lower deck and on the front wall of upper deck at an appropriate height for clear visibility to all passengers in the bus from all angles. Present and next stop details shall be highlighted with flashing in modern different

commuter-friendly colours. The display time, frequency and sequencing of advertisements / messages shall be program controlled. The display system shall have the provision of flashing / highlighting information in pre-programmed mode and through an intervention by the driver / conductor.

54.2. CCTV Cameras

CCTV cameras (6 nos. minimum inside passenger compartments + 1 for reversing operation) of high resolution in visible & IR band and having minimum 48 Hrs backup shall be installed inside the buses. These high-resolution CCTV cameras shall be installed throughout the vehicle is such positions and configuration so as to capture images in all areas, from access doors to passengers seating areas on both decks. **The number of camera and their locations shall be such that all seats are covered for facial recognition.** These cameras should be capable of sending live data over the wireless network (IP) to the centralized control station/centre. So that same could be used for emergency response system.

55.0 GPS based Tracking Device

GPS Units of approved specifications shall be provided for Contracted Buses. The Operator shall provide the TA certificate issued by The Test Agency for this product before initiating the procurement of this product to Authority for approval.

56.0 Specifications of Intelligent Transport System (ITS)

i. The ITS enabled bus with On Bus Intelligent Transport System shall have ITS Control Unit, together with bus driver display console. The CAN Bus data parameters shall be shared over and above the vehicle location data through the on-board telematics system.

   The ITS provided shall be type approved in compliance with IS 16833:2018. The Bus ITS shall be capable to integrate with existing MTC Chennai Intelligent Traffic Management System (ITMS). The bus shall have Passenger Information System (PIS System) at front, rear, side and internal display board with integrated voice announcement system as per requirements given in Clause 54.1 above, integrated GPS device for Automatic Vehicle Location System (with compliance of AIS 140 with emergency buttons for access to every passenger in the bus, preferably protected enclosure for switch) and Security Camera Network (CCTVs) with reverse gear and display screen should meet the specification for IP based cameras and MNVR as per Detailed specification document for CCTV devices as per IS 16833:2018.

ii. The detailed specifications and compliance of individual components of ITS should be as per relevant BIS / AIS standards subject to the following:

   The bus should have minimum 6 (Six) internal and one reverse surveillance IP based CCTV camera and Bus Driver Display Screen to telecast the output from each of the camera in a systematic manner, as per the aforementioned specification. The architect to be finalized by the Purchaser at the time of

Prototype. The number of cameras and their placement should effectively cover each seat so that it will provide face recognition capability when needed.

iii. The other conditions to be complied by the OEM are as given below:

a) VEHICLE TRACKING SYSTEM: To carry out on line vehicle tracking there shall be tracking device (VLT / ATD) as per and system conforming to provisions stipulated in IS 16833:2018 - Annex A with latest Amendments (with compliance for emergency buttons for access to every passenger in the bus, preferably inbuilt box).

b) The CAN Bus data parameters shall be shared over and above the vehicle location data through the on-board telematics system.

c) The specification and architecture and location to be finalized in consultation with the purchaser.

d) The on-board equipment shall be tamperproof and theft proof.

e) Mutually agreed design to be implemented in the prototype bus and to be demonstrated to the purchaser by putting demo surveillance system. After dully approved by the purchaser design to be implemented in all subsequent buses.

f) All the required cables power and signal from ReESS and device to device shall be laid properly as per the provision of Bus Code for electric cables.

g) The requirements of **Vehicle Health Monitoring and Diagnostics** (VHMD) system – Electric bus (eBus) performance and safety are directly linked with the battery performance. The usage of eBus battery under sub-optimal conditions can directly influence the performance as well as life of the battery. Analysis of the impact of different stress factors (Battery temperature, C-rate, DOD, and SOC) on the battery can help in getting more insights into the degradation mechanism and battery aging (i.e. Calendar and Cyclic aging). Monitoring and analysis of some of the battery parameters during eBus operation is important to ensure optimal battery life and eBus performance along with a high level of safety.

As the Battery Management System (BMS) of the eBus battery monitors all the critical parameters of the battery during eBus operation, the availability of these data with the Authority will help in better planning of eBus operation and charging strategies and ensure safety of operations.

The VHMD system along with BMS shall capture and share parameters as listed below through the CAN Bus data on a real time basis with the back-end server / Centralized ITMS platform. The following CAN parameters should be integrated to the on board IoT device/ITS and capable of transmitting data at a frequency of 30 sec to the centralized ITMS server.

I. Timestamp
II. Odometer reading
III. Vehicle Status
IV. SoC (State of Charge)
V. SoH (State of Health)

VI. Speed
VII. Current (pack and cell level)
VIII. Acceleration
IX. Voltage (pack and cell level)
X. Power
XI. Charger Current
XII. Charger Voltage
XIII. Ambient temperature
XIV. Battery Cell temperature
XV. Motor temperature
XVI. BMS error
XVII. Coolant Temperature

The Operator shall provide for communication of additional parameters (if any) as per the requirement of the Centralized ITMS platform.

h) The main hardware shall inter alia include the following:

i. Front LED Display
ii. Rear LED Display
iii. Side LED Display
iv. Internal LED Displays with Integrated / Synchronized Voice Announcement System
v. Amplifier, Speakers
vi. ITS Controller with Display
vii. GPS Device (Automatic Tracking Device) with Emergency Button(s)
viii. Power and Communication Harness
ix. Bus Driver Display Console 7" TFT- Screen in front of driver (including reverse view)
x. Surveillance Cameras (5 Nos. minimum), four numbers to monitor bus interiors (doors, driver zone, ticketing zone etc.) and one no. Reverse View - IPC.
xi. Digital video recorder (mNVR) with Hard Disk 1TB -2.5" SATA HDD (Output telecast from each Camera)

57.0 Hammers for breaking window glasses during emergency

Adequate numbers of hammers of suitable design and mass for breaking window glasses during emergency shall be provided and suitably mounted on the interior walls of passenger saloons. Mounting of hammer shall be pilferage-proof.

58.0 Ventilation and Air conditioning (VAC) climate control system:

(a) The electronically controlled VAC system shall be provided for cooling of the interior compartments (Lower and Upper decks) of the Bus suitable for the climatic / environmental conditions of Chennai Metropolitan areas as stipulated in clause 2.7 of this schedule.

(b) The bus shall be provided with aesthetically mounted CFC-free Air-conditioning system (i.e. evaporator and condenser unit) conforming to Indian / International standards driven by prime-mover drawing power from ReESS. The system shall be so mounted to facilitate ease of access for repair & maintenance. Proper care shall be taken for insulating the system for optimum efficiency. Proper AC ducting shall be installed inside saloon for uniform distribution of conditioned air in passenger compartments on both the decks. Provision shall be made to provide cool air at Driver's compartment through separate duct outlet.

(c) The settable Automatic Electronic temperature control arrangement shall be provided for the AC system. Status indicator and diagnostic tale tells shall be provided on Dash board in Driver's compartment.

(d) Two no. of Escape hatches shall be provided as per the AIS 052. One in front portion and one in the rear position. Both these hatches shall have electrically operated fans. The one mounted in the front portion shall be sucking the fresh air in the passenger compartment, while the one fitted at the rear shall be expelling the compartment air to outside atmosphere, thus creating forced ventilation across the compartment. This system shall be automatically controlled in the event of failure of Air Conditioning system, manual override may be provided from Driver's compartment by a control on Instrument panel. When AC system is ON the manual control switch which manually operates these fans, shall become non responsive to its actuation.

(e) Air Curtains on entry / exit gates to avoid loss / gain of heat and / or cool air when doors are frequently opened for boarding / alighting of passengers, having minimum air flow rating of 1000 ± 50 m^3/hr at each gate that shall be switched on along with the Door open command, remain operational throughout the door opened phase and switched off once the door is completely closed. Air Curtain shall only be operational when Air conditioning system is ON. Type of air curtains at entry exit gates their power consumption etc. be accounted for while deciding / Propulsion systems power, etc.

(f) The whole bus body shall be thermally insulated with flame retardant Polyurethane or glass wool of minimum 40 kg/m3 density as per Bus Code.

(g) The air conditioning portion of VAC system shall be capable of reducing the passenger compartment temperature from 42^0 C to 32^0 C in less than 20 minutes after AC system start up with service door closed with declared seated and standee passenger's load. The air shall be composed of not less than 20% outside fresh air. Airflow should be evenly distributed throughout the bus with air velocity not exceeding 100 feet / minute (0.508 m/Sec.) on any passenger. Compliance through testing NABL accredited laboratory (for such tests) to this performance requirement shall be produced during prototype approval stage.

Testing conditions for Performance Requirement with full heat load equivalent to seating and standee passengers plus any auxiliary load connected to ReESS that will contribute to heat load.

a) Saloon Temp. 24± 4°C (when outside ambient temp. up to 42°C)

b) Temperature difference of 15° (Outside ambient temp. > 42°C) of saloon temperature. e.g. If the saloon temperature is 45˚, then the target temperature inside the bus is 45˚-15˚= 30˚.

c) Minimum average air velocity at air vent is 4.5 m/s

(h) **On-field Trials** - One bus from production lot shall tested by MTC for the verification of on-field performance of V&AC system. The test shall be in the afternoon during peak summer. Bus shall be loaded with live passenger load as defined in clause 2.3, all the connected loads shall be on. After half an hour of driving the bus, temp. and humidity will be checked at multiple locations on both the decks and recorded. The same set of readings are repeated after five minutes. This temp and Humidity data shall be collected at an interval of 5 minutes till the readings does not very for more than 0.5 deg. C and 3% for relative humidity. This indicates that the V&AC system and air inside the passenger area has stabilised. The acceptance criteria shall be average temp to be 25 + 2 Deg. C and RH 40 + 5 %, with none of the temp. readings shall be more than 28 Deg. C. and Humidity reading more than 50 RH.

(i) Air circulations and ventilation in driver's area - An air passage / duct / roof hatch (operated in the event of AC failure) to be provided in driver area at a suitable location for proper inflow of air inside the driver cab. Additionally**,** Drivers work area to be provided with blower or suitable device (200 mm diameter fan) to ensure proper ventilation.

(j) Maximum noise levels inside the saloon (irrespective of AC, Propulsion systems location) as per test procedure as per AIS 020

(k) The whole bus body shall be thermally insulated with flame retardant Polyurethane or glass wool of minimum 40 kgs/m^3 density as per bus code.

(l) The Air conditioning System shall be complying to and approved by The Test Agency as per Annexure 4 of UBS II.

(m) On field trials of the Prototype bus for intended operations

On field trials for the intended operations and environment on the Prototype bus shall be conducted for a period of not less than seven days in varying traffic conditions on identified route(s) without any charges payable to the Bidder. The trial shall include a few routes with the high vehicle utilization and operated in varying traffic conditions in Chennai with passenger load subject to the following conditions:

a. Selection of Route(s) and timetable for the bus shall be made by MTC Chennai.

b. The Bidder shall provide the drivers, while MTC Chennai shall provide conductors for the bus.

c. The fare collected from these buses shall be collected and retained MTC Chennai

d. Suitable space in the existing depots with power connection shall be provided by MTC Chennai to the Bidder for charging of batteries of Electric Bus.

e. The Bidder shall ensure the charging, upkeep and maintenance of the bus.

f. The expenditure on account of electricity consumed for the charging infrastructure shall be borne by the MTC Chennai.

MTC Chennai may prescribe any other route for the purpose of on-field trials. MTC Chennai shall have the option to carry out the trials with equal weight to arrive M_{max} instead of actual passengers to test the efficacy of bus where it may not be possible on some routes to have passengers on the bus.

Schedule AB

Environment Social Health and Safety (EHS) Requirements

The project covering Procurement, supply, operation and maintenance of 20 (Twenty) Double Decker Air Conditioned electric buses on Gross Cost Contract (GCC) is part of Chennai City Partnership (CCP) program which is being implemented as a Program-for-Results "PforR" operation of the World Bank. Hence all activities under the program needs to be comply with Environmental and Social Systems Assessment (ESSA) Report of the Program. In this regard, the following Environment Social Health and Safety (EHS)requirements have been formulated to comply with the ESSA and the same needs to be adhered by the Authority and the Operator (as applicable) as part of the project during the currency of this Agreement;

1. Excluded Locations for various activities:

1.1. All activities associated with the Operation & Maintenance of Buses are proposed to be undertaken in the Maintenance Depots. For proposed modifications and related activities, the need for CTE "Consent to Establish" (if applicable) and CTO "Consent to Operate" renewal shall be obtained from Tamil Nadu Pollution Control Board (TNPCB) along with other licenses and permits by Authority.

1.2. No depot operation & maintenance works or disposal of wastes / wastewater or other activities shall affect demarcated forest area, critical habitats, archaeologically protected monuments/areas, or excluded as per Coastal Regulation Zone ("CRZ") notification. The Authority shall ascertain and take required permissions if any activity requires CRZ clearance in any Maintenance Depot or any proposed Maintenance Depot.

1.3. Sites/ locations which should be excluded as per applicable siting criteria prescribed by TNPCB, master plan, excluded disaster zones, or other applicable criteria set out by National, State, Local Body will not be included in the Operation & Maintenance activity.

1.4. Activities that involve (i) purchase, storage, and use of banned pesticides/ insecticides/chemicals/asbestos, (ii) Contaminated Areas, not conducive for the proposed activity or use, will not be allowed.

1.5. Repairs and operation & maintenance in the depots shall be strictly in line with regulations, without any pollutants, waste, waste water discharge or safety concerns affecting any cultural resources, religious activities or sensitive areas including waterbodies, nalas, canals

2. Worker Facilities and Occupational Health & Safety (OHS)

2.1. All worker facilities & OHS shall be ensured as per regulations by the authority (for its employees employed for the Project under this Agreement) & the operators for its work force under GCC E-Bus Operations. The Maintenance Depot shall be provided by Authority in line with Factories Act/ other National / State regulations and it is the obligation of the Operator to operate and maintain it in compliance with Factories Act/ other National / State regulations throughout the Concession Period. This includes (but not limited to) canteen, crew accommodation, first aid, water supply, adequate number of clean & well-maintained toilets (separate for male/female workers) with continuous water supply & appropriate connection to public sewer or septic tank,

lighting, signages, etc.

3. Materials, and Waste Management

3.1. Appropriate dust, noise, vibration, air pollution, waste and wastewater pollution prevention mechanisms and safety measures shall be adopted so that there is no disturbance to communities or sensitive receptors such as schools, hospitals etc. nearby

3.2. Solid waste (including. dry, wet & sharps, biomedical wastes if any), C&D wastes (if any), e-waste (including electronics, solar panels etc), hazardous wastes (including existing asbestos if removed), batteries, chemicals & sludge shall be segregated at source & stored in different colour coded Bins, and treatment and disposed shall be arranged in municipal / other or own facilities as in corresponding Rules. No food waste shall be stored in the premise for more than 24 hours. No dumping of waste inside or outside premises shall be permitted.

3.3. Asbestos waste (from roofs, pipes etc.) if any shall not be tampered. It shall be safely stored & transported in covered manner; & disposed at hazardous waste TSDF (Treatment, Storage and Disposal Facilities) in line with National State regulations& special SOPs. Effluent Treatment Plant (ETP) sludge, used oil, Batteries etc. shall be disposed as hazardous or e-waste as per consent conditions and / or existing regulations without any harm to environment or people.

3.4. Materials such as solvents, paints, packaging material, and waste may release toxic gases & create accident risks if not handled in line with regulations and permit conditions. Need regular monitoring of compliance in line with Consent Conditions, permits & regulations.

3.5. Fuel including LPG, materials required for including ETP, canteen, painting areas, maintenance aspects etc need proper safekeeping only in approved quantities. Consent conditions shall be followed & monitored by the Authority. Hazardous materials permits shall be obtained.

3.6. Use C&D waste / recycled material as much as possible in the depot.

3.7. The Wastes and fuels, materials will be stored in a safe manner in such a way that it will not be affected by floods. Disaster management / Emergency Response Plan will be prepared & followed. All workers will be trained at intervals in emergency related response measures including Fire Safety. Fire safety measures will be in place in discussion with Fire & Rescue Department, Alternate entry, exist & emergency exist ways free of any obstructions & proper stacking of materials with ease of access for fighting fires, and Water storage for use during Fire in Water tanks will be maintained.

3.8. ETP sludge shall be checked for chemicals & hazardous matter & disposal arranged in line with Consent Condition. Consent shall be renewed as required & reports furnished to TNPCB on time.

4. Special Situations & Emergencies

4.1. Chance find procedures to be followed in line with regulations

4.2. All safety requirements shall be followed during emergencies. Hazards shall be identified & safety, emergency & Fire response plans shall be prepared and followed throughout the operations period

4.3. Disabled friendly infrastructure will be provided by the Authority at the Bus depot and the same to be operated and maintained by the operator in line with National / State regulations, guidelines and standards

4.4. Disabled friendly designed buses to be provided by the operator in line with National / State regulations, guidelines and standards.

4.5. The Operator shall ensure that no activity in Maintenance Depot shall hinder natural drainage. Suitable emergency response procedures shall be developed and followed so that there is no impact of pollution or safety in case of floods.

4.6. All hazardous material, batteries, fuels, chemicals, existing banned materials, tools and waste shall be segregated in separate well labeled containers and stored in areas that would not be affected by floods, winds etc.; and platforms above Highest Flood Level (HFL), with cut off drains, spill prevention and containment measures & SOPs.

5. Housekeeping &Greening the Depots

5.1. Good housekeeping shall be maintained at Depot at all times; without posing hazards, pollution or safety issues to the environment or people

5.2. No forest lands are converted and no tree cutting is anticipated during the Concession Period. However, greenbelt as per Consent Conditions and shrubbery/ landscaping currently maintained and handed over by the Authority shall be maintained by the Operator in good and healthy condition, for good ambience and emission absorptive properties and environmental benefits.

6. Water & Wastewater Management

6.1. No further ground water exploitation is permitted. Rain Water Harvesting and storage to be developed by Authority. Operator shall use water supplied by Chennai Metropolitan Water Supply and Sewerage Board (CMWSSB) and any additional requirement should be managed through reuse of ETP treated water, rain water harvesting and by purchase of water from tankers.

6.2. Water used for bus cleaning shall be appropriately recycled and reused. The Recycled water shall be reused for Green Belt/Flushing/Fire hydrant activities. Authority has developed Rain Water Harvesting (RWH) facility already in existing RCC buildings and under process and maintenance shed for the all six depots. Operators have to maintain the Rain Water Harvesting (RWH) systems in full working conditions.

6.3. The Operator shall maintain the Water recycling and Ground Water (GW) recharging systems.

6.4. All waste & wastewater shall be discharged in line with regulations & qualities monitored & records maintained (quantity & quality of waste, waste water) at each depot. Storm water from depot area shall not get contaminated

6.5. No sewage or effluents shall be disposed into the drains or waterbodies etc. water from ETP will be recycled & reused

7. Monitoring & Record Keeping

7.1. The water used for Consumption (Drinking and Cooking) and Canteen use shall be tested periodically by Operator to conform to Indian Standards, and monitoring results shall be maintained as Records in the Maintenance Depot.

7.2. Records of sewage sent to fecal sludge management facility for the Maintenance Depot shall be maintained at the Maintenance Depot. ETP sludge shall be checked for chemicals & hazardous matter & disposal arranged in line with Consent Condition. Consent shall be renewed as required & reports furnished to Pollution Control Board (PCB) on time.

7.3. Solid Waste, Sewage and Treated Effluent from ETP shall be disposed in line with National/ State Regulations and Conditions in Consent to Operate & periodic reports shall be maintained at the Maintenance Depot, and submitted to TNPCB in line with regulations.

All records shall be kept at the Depot including incident reports, monitoring results, cleaning schedules, waste & effluent quantities etc.