Maintenance Contract

The Director General of the Department of Transport for and on behalf of Transport for NSW (TfNSW)

Pyrmont Light Rail Company Pty Limited
ACN 065 183 913 (PLRC)

CAF Rail Australia Pty Ltd
ABN 15 146 694 537 (Contractor)
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Maintenance Contract

DATE 01 August 2012

PARTIES

The Director General of the Department of Transport for and on behalf of Transport for NSW (TfNSW)

Pyrmont Light Rail Company Pty Limited ACN 065 183 913 (PLRC)

CAF Rail Australia Pty Ltd ABN 15 146 694 537 (Contractor)

RECITALS

TfNSW has agreed to engage the Contractor, and the Contractor has agreed to accept the engagement by TfNSW, to maintain the Vehicles and the Signalling Equipment on the terms of this Contract.

OPERATIVE PROVISIONS

1. INTERPRETATION

1.1 Definitions

The following definitions apply in this Contract.

Accredited means accredited under Part 3 of the Rail Safety Act or such other accreditation required under any regime replacing Part 3 of the Rail Safety Act.

Additional Services means:

(a) maintenance or repairs to the Signalling Equipment (other than Scheduled Maintenance) to the extent such maintenance or repairs must be carried out by a Qualified Signalling Engineer;

(b) first-line maintenance and repairs to the Signalling Equipment to the extent undertaken outside Working Hours;

(c) the recovery of a Vehicle the subject of a Failure and its return to the Stabling Facility outside Working Hours;

(d) repair of:

(i) significant dents and scrapes to a Vehicle; or

(ii) major paint work blemishes;

(e) removal of graffiti (pieces and spray tagging); or

(f) Heavy Maintenance to a Variotram.
**Additional Services Payment** means an amount payable to the Contractor for carrying out Additional Services, as determined in accordance with section 3 of Annexure L.

**Affected Party** means a party affected, or which alleges it is affected, by a Force Majeure Event.

**Annual Works Plan** means a plan that complies with the requirements of section 10 of Annexure A, as may be amended and updated from time to time in accordance with clause 20.

**Asset** has the meaning given to it in Annexure E.

**Asset Management Plan** means a plan that complies with the requirements of section 9 of Annexure A, as may be amended and updated from time to time in accordance with clause 20.

**Asset Register** means a register of the Assets complying with the requirements set out in Annexure E.

**Authorisation** means:

(a) an approval, authorisation, consent, declaration, exemption, permit, licence, notarisation or waiver, however it is described, and including any condition attached to it; and

(b) in relation to anything that could be prohibited or restricted by law if a Government Agency acts in any way within a specified period, the expiry of that period without that action being taken,

including any renewal or amendment and includes accreditation under the Rail Safety Act.

**Availability Event** has the meaning given to it in Annexure F.

**Availability Payment** means an amount determined in accordance with Annexure F.

**Available** means, with respect to each Vehicle, that:

(a) in the reasonable opinion of the Operator:

(i) the Vehicle is safe for operation on the LRT;

(ii) the Vehicle has the functionality necessary for reliable operation on the LRT; and

(iii) the exterior of the Vehicle is clean; and

(b) the Vehicle is not subject to a Failure,

(and **Availability** has the corresponding meaning).

**Base Rate** means:

(a) the fixed rate per cent per annum determined by taking the average mid rate displayed at or about 10:00am on the Commencement Date on the Bloomberg screen "AFMM Interest Rate Swaps – 10AM" page for a period equal to the Term; and

(b) if for any reason the Term does not match an equivalent period on the Bloomberg screen "AFMM Interest Rate Swaps – 10AM" page, the applicable rate will be determined through the process of interpolation between the relevant rate periods.
**Business Day** means a day (other than a Saturday, Sunday or public holiday) on which banks are open for general banking business in Sydney.

**CAMS** means a computerised asset management system complying with the requirements set out in Annexure E.

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Claim means any claim, action, demand or proceeding:

(a) under, arising out of, or in any way in connection with, this Contract;

(b) arising out of, or in any way in connection with, the Services or any party's conduct prior to the date of this Contract; or

(c) otherwise at law or in equity including:

(i) by statute;

(ii) in tort for negligence or otherwise, including negligent misrepresentation; or

(iii) for restitution or quantum meruit.

**Commencement Date** means:

(a) the date which is 3 months after the Contract Effective Date; or

(b) if, pursuant to clause 4.1(b), TfNSW notifies the Contractor that TfNSW has elected to extend the Commencement Date, the date which is 6 months after the Contract Effective Date.
**Commercially Sensitive Information** means information that discloses:
(a) the Contractor's financing arrangements, or
(b) the Contractor's cost structure or profit margins, or
(c) any intellectual property in which the Contractor has an interest, or
(d) any matter the disclosure of which would place the Contractor at a substantial commercial disadvantage in relation to other contractors or potential contractors, whether at present or in the future.

**Confidential Information** means all information and materials disclosed, provided or otherwise made accessible by either party in connection with this Contract, whether before, on or after the date of this Contract, but excluding information that the Recipient can prove:
(a) was in the public domain at the date of this Contract;
(b) after the date of this Contract, became part of the public domain otherwise than as a result of disclosure by the Recipient or its personnel in breach of this Contract; or
(c) was in its possession at the time of disclosure by or on behalf of the Discloser to the Recipient and was not otherwise acquired from the Discloser directly or indirectly.

**Contaminant** means any:
(a) toxic or hazardous substance, gas, liquid or material, any dangerous goods, hazardous or special waste or discharge (other than properly and lawfully discharged sewage), or any Pollutant or any constituent of any such substance or waste in any water, soil or in the air including acid sulphate soils; or
(b) substance at a concentration above the concentration at which the substance is normally present in, on or under (respectively) land in the same locality, being a presence that presents a risk of harm to human health or any other aspect of the environment.

**Contract Effective Date** means the date of this Contract.

**Contract Year** means:
(a) the period of one year commencing on (and including) the Commencement Date; and
(b) each subsequent year of the Term, commencing on (and including) the anniversary of the Commencement Date.
**Contractor Insurance Policies** has the meaning given to it in clause 27.1.

**Contractor's Personnel** means officers, employees and agents of the Contractor.

**Contractor's Staffing Plan** means the document at Annexure O.

**Corporations Act** means the *Corporations Act 2001* (Cth).

**Deed of Disclaimer** means the deed so named executed by the Contractor on 30 November 2011.

**Delivery** means, with respect to each LRV, that the LRV has been delivered in accordance with the requirements set out in the Supply Contract.

**Discloser** means a party that discloses Confidential Information to the other party.

**Dispute Resolution Board** means the board consisting of Max Tonkin, Tim Sullivan and Graeme Peck (as chairperson) or their replacements, referred to in clause 37.

**DRB Agreement** means the Dispute Resolution Board Agreement set out in Annexure Part J.

**Encumbrance** means any mortgage, charge, lien, title retention, trust, power or other encumbrance.

**Endemic Failure** means:

(a) in any rolling 90 day period:

(i) the same fault or malfunction in a LRV or part thereof occurs in three or more of the LRVs; or

(ii) a specific part or component in a LRV fails in three or more of the LRVs; or

(b) in any rolling 12 month period:

(i) the same fault or malfunction in a LRV or part thereof occurs in four or more of the LRVs; or

(ii) a specific part or component in a LRV fails in four or more of the LRVs.

**Environment** includes all aspects of human surroundings such as the atmosphere, waters (including ground, surface and stored water), land, sound, odours, tastes, the biological factors of animals and plants and the climate.

**Environmental Law** means a law regulating or relating to the Environment.

**Environmental Management Plan** means a plan that complies with the requirements of section 8 of Annexure A, as may be amended and updated from time to time in accordance with clause 20.

**Existing Maintenance History Information** means any maintenance history information which existed at the Contract Effective Date.

**Expiry Date** means:

(a) midnight on the date 3 years after the Commencement Date;

(b) if extended pursuant to clause 4.3, the Extended Expiry Date;

(c) if extended pursuant to clause 4.4, the Further Extended Expiry Date; and
(d) if extended pursuant to clause 4.5, the Final Expiry Date.

**Extended Expiry Date** means midnight on the date 3 years after the Expiry Date.

**Failure** means that the Vehicle is immobilised.

**Final Expiry Date** means midnight on the date 1 year after the Further Extended Expiry Date or as otherwise extended from time to time pursuant to clause 4.5.

**Further Extended Expiry Date** means midnight on the date 3 years after the Extended Expiry Date.

**Government Agency** means:

(a) a government or government department or other body;

(b) a governmental, semi-governmental or judicial person; or

(c) a person (whether autonomous or not) who is charged with the administration of a law.
GST has the same meaning as in the GST Legislation.

GST Legislation means the A New Tax System (Goods and Services Tax) Act 1999 (Cth) and any related Act imposing such tax or legislation that is enacted to validate, recapture or recoup such tax.

Heavy Maintenance means, in respect of a Variotram only:

(a) the maintenance activities set out in Table 2 (Heavy Maintenance) of section 2.5 of the Scope of Maintenance Services; and

(b) the maintenance activities identified as "heavy maintenance" in the Not Rejected Variotram Technical Maintenance Plan.

Heavy Maintenance Recommendation Proposal has the meaning given to it in section 2.6 of the Scope of Maintenance Services.

Incident Reporting and Response Plan means a plan that complies with the requirements of section 6 of Annexure A, as may be amended and updated from time to time in accordance with clause 20.

Initial Maintenance Spares means the types and quantities of spare parts for the Variotrams set out in Annexure G.

Insolvency Event means, in respect of a person:

(a) an administrator being appointed to a person;

(b) a person resolving to appoint a Controller or analogous person to a person or any of a person's property;

(c) an application being made to a court for an order to appoint a Controller, provisional liquidator, trustee for creditors or in bankruptcy or analogous person to a person or any of a person's property;

(d) an appointment of the kind referred to in paragraph (c) being made (whether or not following a resolution or application);

(e) the holder of a Security Interest or any agent on its behalf, appointing a Controller or taking possession of any of a person's property;

(f) a person being taken under section 459F(1) of the Corporations Act 2001 (Cth) to have failed to comply with a statutory demand;

(g) an application being made to a court for an order for a person's winding up;

(h) an order being made, or a person passing a resolution, for a person's winding up;

(i) a person:

(i) suspending payment of its debts, ceasing (or threatening to cease) to carry on all or a material part of its business, stating that it is unable to pay its debts or being or becoming otherwise insolvent; or

(ii) being unable to pay its debts or otherwise insolvent;

(j) a person taking any step toward entering into a compromise or arrangement with, or assignment for the benefit of, any of its members or creditors;
(k) a court or other authority enforcing any judgment or order against a person for the payment of money or the recovery of any property; or

(l) any analogous event under the laws of any applicable jurisdiction, unless this takes place as part of a solvent reconstruction, amalgamation, merger or consolidation that has been approved in writing by the other party.

Insurance Spares means the types and quantities of spare parts set out in Annexure G.

Intellectual Property Right means all present and future rights conferred by statute, common law or equity in or in relation to copyright, trademarks, patents, designs, circuit layouts, plant varieties, business and domain names, inventions and confidential information and other results of intellectual activity in the industrial, commercial, scientific, literary or artistic fields whether or not registrable, registered or patentable. These rights include:

(a) all rights in all applications to register these rights;

(b) all renewals and extensions of these rights; and

(c) all rights in the nature of these rights, such as Moral Rights.

IWE or Inner West Extension means the proposed light rail project along the route between Catherine Street, Lilyfield to Dulwich Hill using the existing freight rail line from Wattle Street, Pyrmont to Dulwich Hill.

IWE Works means the works in connection with the IWE to be carried out and completed by TfNSW.

Legislative Requirements means:

(a) Acts, Ordinances, regulations, by-laws, orders, awards and proclamations of the Commonwealth and New South Wales;

(b) certificates, licences, consents, permits, approvals, accreditations and requirements of authorities and organisations having jurisdiction in connection with the carrying out of the obligations under this Contract and the Vehicles;

(c) all laws, rules, regulations, instructions, directives, codes of practice and conduct compliance with which is mandatory in the rail industry in Australia or New South Wales; and

(d) fees and charges payable in connection with the foregoing.

Loss includes:

(a) any cost, expense, loss, damage or liability, whether direct, indirect or consequential; and

(b) without being limited by paragraph (a) and only to the extent not prohibited by law, any fine or penalty.

Low Period means on any day, the hours of midnight to 5.30am.

LRT means the Sydney light rail mass public transit system from Central Station, Sydney to Catherine Street, Lilyfield and on and from the commencement of operations services of the IWE, the Inner West Extension.

LRVs means the light rail vehicles supplied under the Supply Contract.
**Maintenance Fee** means the:

(a) Monthly Service Payment; and

(b) Additional Services Payment,

as may be adjusted in accordance with this Contract.

**Maintenance History Information** means all data, diagrams, drawings and records whether in physical or electronic form created by, or on behalf of, the Contractor in the carrying out the Services, including the Maintenance Plans and all information and data stored in the CAMS but excluding Maintenance Procedure Information.

**Maintenance Plans** means:

(a) in respect of the Variotrams, the Not Rejected Variotram Technical Maintenance Plan; and

(b) in respect of the LRVs, the Not Rejected Technical Maintenance Plan.

**Maintenance Procedure Information** means information whether in physical or electronic form on the technical procedures applied by the Contractor in carrying out the Services, including items of fault diagnosis.

**Maintenance Services WHS Plan** means a plan that complies with the requirements of section 7 of Annexure A and the WHS Guidelines, as may be amended and updated from time to time in accordance with clause 20.

**Maintenance Spares** means the spare parts identified in the Maintenance Plans.

**Mobilisation Period** means the period from and including the Contract Effective Date to the Commencement Date.

**Monthly Maintenance Report** has the meaning given to it in Annexure D.

**Monthly Performance Report** has the meaning given to it in Annexure D.

**Monthly Service Payment** means an amount payable to the Contractor for carrying out the Services (other than Additional Services), as determined in accordance with section 2 of Annexure L.

**Moral Rights** has the meaning given in the Copyright Act 1968 (Cth).

**Not Rejected** means, in respect of each Project Plan:

(a) TfNSW has issued a notice that the Project Plan is "Not Rejected" under clause 20.2(b)(i);  

(b) TfNSW has issued a notice that the Project Plan is "Not Rejected Subject to Comments" under clause 20.2(b)(i) and the Contractor has updated that Project Plan to TfNSW's satisfaction to address the comments made by TfNSW; or

(c) that the Project Plan is deemed "Not Rejected" under clause 20.2(c).

**OEM** means the original equipment manufacturer.

**Off-Peak Period** means:

(a) on any Business Day, the hours of 10am to 3.30pm and 7.30pm to midnight; and

(b) on any non-Business Day, the hours of 5.30am to midnight.

Operating Instruction Manual means the document by that name prepared by the Contractor in accordance with the Supply Contract.

Operation Manuals means:

(a) in respect of the Variotrams, the Operation and Maintenance Manuals available for viewing at the Stabling Facility; and

(b) in respect of the LRVs, the Operating and Maintenance Manuals at Annexure N.

Operational Completion means that stage in the carrying out of the work under the Supply Contract when the requirements set out in Annexure Part F of the Supply Contract have been satisfied.

Operational Interface Plan means a plan that complies with the requirements of section 5 of Annexure A, as may be amended and updated from time to time in accordance with clause 20.

Operations Control Centre means the operations control centre for the Vehicles located at 190 Pyrmont St, Pyrmont.

Operator means Veolia Transport Sydney Pty Ltd (ABN 34 096 046 052) or any other entity replacing Veolia Transport Sydney Pty Ltd (including TfNSW if no other entity is appointed to this role) as notified by TfNSW to the Contractor.

Overdue Rate means the aggregate of:

(a) 3%; and

(b) the relevant Base Rate.

Peak Period means on any Business Day, the hours of 5.30am to 10am and 3.30pm to 7.30pm.

Performance Data has the meaning given to it in Annexure D.

Persistent Breach means:

(a) in any rolling 90 day period:

(i) 30 or more Availability Events during the Peak Periods;

(ii) 20 or more Availability Events during the Off-Peak Periods; or

(iii) 40 or more Availability Events during Peak Periods and/or Off-Peak Periods; or

(b) in any rolling 12 month period:

(i) 60 or more Availability Events during the Peak Periods;

(ii) 40 or more Availability Events during the Off-Peak Periods; or

(iii) 80 or more Availability Events during Peak Periods and/or Off-Peak Periods.
**Pollutant** includes any solid, liquid, gas, odour, heat, sound, vibration, radiation or substance which makes or may make the environment:

(a) unsafe or unfit for habitation or occupation by persons or animals;
(b) degraded in its capacity to support plant life;
(c) contaminated; or
(d) otherwise environmentally degraded.

**Project Plan** means each of:

(a) the Maintenance Plans;
(b) the Transition Plan;
(c) the Operational Interface Plan;
(d) the Maintenance Services WHS Plan;
(e) the Through Life Support Plan;
(f) the Incident Reporting and Response Plan;
(g) the Environmental Management Plan;
(h) the Asset Management Plan; and
(i) the Annual Works Plan.

**Qualified Signalling Engineer** means a professional engineer holding appropriate qualifications in NSW to carry out work on the Signalling Equipment.

**Qualifying Change in Law** means a Change in Law that:

(a) requires the Contractor to incur additional costs to carry out the Services (which would not otherwise be expected to be incorporated into the Maintenance Fee as a consequence of any indexation of the Maintenance Fee pursuant to this Contract); or

(b) decreases the Contractor's costs in carrying out the Services.

**Rail Safety Act** means the *Rail Safety Act 2008* (NSW) and regulations promulgated under that Act.

**Recipient** means a party to whom Confidential Information is disclosed.

**Relief Event** means:

(a) a Force Majeure Event;

(b) loss (including theft), damage or destruction to a Vehicle to the extent that such loss (including theft), damage or destruction:

(i) is caused by a third party (other than the Contractor's Personnel) whilst that Vehicle was on the LRT or at the Stabling Facility; or
(ii) occurs as a result of an act or omission of TfNSW, the Operator or any person for whom TfNSW is responsible which is not an act or omission:

(A) expressly permitted by this Contract; or

(B) within a time frame expressly permitted by this Contract;

(c) a breach of this Contract by TfNSW; or

(d) to the extent the Contractor can demonstrate, to the reasonable satisfaction of TfNSW, that a Vehicle is Unavailable as the direct result of:

(i) the operation of that Vehicle by the Operator not in accordance with the Operation Manuals; or

(ii) a failure by TfNSW to undertake (or direct the Contractor to undertake) Heavy Maintenance but only to the extent the Contractor has provided TfNSW with a Heavy Maintenance Recommendation Proposal in respect of that Heavy Maintenance,

and provided that the Relief Event is not as a result of, arises out of or in connection with, or continues as a result of:

(e) any failure by the Contractor to comply with Legislative Requirements;

(f) any failure by the Contractor to comply with its obligations under this Contract; or

(g) any other act or omission of the Contractor, the Contractor's Personnel or any person for whom the Contractor is responsible.

Reports has the meaning given to it in clause 22.1.

Required Number means:

(a) prior to Operational Completion:

(i) during a Peak Period or Off-Peak Period, five Variotrams; and

(ii) during a Low Period, two Variotrams; and

(b) post Operational Completion:

(i) during a Peak Period, the total fleet of Vehicles (being all Variotrams and all LRVs supplied under the Supply Contract) less three;

(ii) during an Off-Peak Period, the total fleet of Vehicles (being all Variotrams and all LRVs supplied under the Supply Contract) less five; or

(iii) during a Low Period, three Vehicles,

provided that the Required Number during a Special Event will be as set out in the relevant Special Event Requirements.

Return Condition Report has the meaning given to it in clause 36.1.

Scheduled Maintenance means the scheduled maintenance activities set out in sections 2.2 and 3.2 of the Scope of Maintenance Services.

Scope of Maintenance Services means Annexure B, as may be amended from time to time in accordance with this Contract.
**Senior Service Engineer** means a technician or professional engineer with no less than five years' experience in the maintenance of rail vehicles.

**Services** means all the work and services the Contractor is required to perform under this Contract.

**Shortfall** has the meaning given to it in Annexure F.

**Signalling Equipment** means the combination of automatic signals and route set interlocking, audio frequency track circuits, electrical switch machines, hand operated points on the LRT and the lineside components of the Automatic Train Protection (ATP) system.

**Signalling Equipment Spares** means the types and quantities of spare parts set out in Annexure G.

**Special Event** means an event which TfNSW reasonably believes will result in additional demand on the LRT, including special public events and holidays.

**Special Event Requirements** has the meaning given to it in clause 13.5.

**Specialist Maintenance Tools** means those items set out in Annexure K in the quantities specified in Annexure K.

**Stabling Facility** means the stabling facility for maintenance and stabling of the Vehicles for the LRT located at 190 Pyrmont St, Pyrmont.

**Subcontract** means any contract between the Contractor and a Subcontractor.

**Subcontractor** means an entity engaged by the Contractor to carry out part of the Services, including a consultant or supplier.

**Supplier** means Construcciones y Auxiliar de Ferrocarriles S.A. CIF A20001020.

**Supply Contract** means the supply agreement for the LRVs between TfNSW, PLRC and the Supplier dated on or around the date of this Contract.

**Tax** means any income tax, payroll tax, fringe benefits tax, superannuation guarantee surcharge, stamp duty and other tax, levy, impost, duty, deduction, tax concession, fee, charge, withholding plus any interest, penalty, charge, fees or other amounts payable in respect thereof.

**Tax Invoice** means the same as in the GST Legislation.

**Technical Maintenance Plan** means a plan that complies with the requirements of section 2 of Annexure A as may be amended and updated from time to time in accordance with clause 20.

**Technician Tradesman** means an appropriately qualified technician trained in the maintenance of rail vehicles.

**Term** means the term of this Contract specified in clause 4.1.

**TfNSW Event of Default** means:

(a) a failure by TfNSW to make a payment to the Contractor due and payable pursuant to this Contract; or

(b) a failure by TfNSW or PLRC, as the case may be, to provide the Contractor with access to the Stabling Facility in accordance with this Contract.
TfNSW Spares means the Insurance Spares and the Signalling Equipment Spares.

Through Life Support Plan means a plan that complies with the requirements of section 4 of Annexure A, as may be amended and updated from time to time in accordance with clause 20.

Transition Plan means a plan that complies with the requirements of section 3 of Annexure A as may be amended and updated from time to time in accordance with clause 20.

Unavailable means, with respect to each Vehicle, that the Vehicle is not Available.

Unscheduled Maintenance means:

(a) all maintenance and repairs to the Vehicles (other than Scheduled Maintenance and Heavy Maintenance) required to ensure that:

   (i) the Required Number of Vehicles are Available at all times during the Term; and

   (ii) each Available Vehicle is fit for the purpose of operating on the LRT (if operated in accordance with the Operation Manuals); and

(b) the maintenance and repairs to the Signalling Equipment set out in section 3.3 of the Scope of Maintenance Services,

but excluding Additional Services.

Variation means a variation to the Services including additions, increases, decreases omissions and deductions to and from the Services, including a variation to:

(a) the Scope of Maintenance Services; or

(b) the Required Number.

Variotram Scheduled Maintenance Regime means Table 2 (Vehicle Scheduled Maintenance Regime) in the Scope of Maintenance Services.

Variotram Technical Maintenance Plan means a plan that complies with the requirements of section 1 of Annexure A, as may be amended and updated from time to time in accordance with clause 20.

Variotrams means the light rail vehicles which are used on the LRT as at the date of this Contract.

Vehicles means the Variotrams and the LRVs (and each is a Vehicle).

Waste includes any material to be removed and/or disposed of in the course of performing the Services together with any extraneous by-products of the Services including but not limited to:

(a) trade waste, being any matter or thing, whether solid, liquid or gaseous or a combination of solids, liquids and gases (or any of them), which is of a kind that comprises refuse from any industrial, chemical, trade, commercial or business process or operation, including any building or demolition work;

(b) garbage, being all refuse other than trade waste and effluent;
(c) any flammable materials, explosives, radioactive materials, hazardous or toxic substances, asbestos or any material containing asbestos or similar or related materials;

(d) any emission into the air of any impurity as defined in the Protection of the Environment Operations Act 1997 (NSW);

(e) any chemical waste, whether declared or not, as defined in the Environmentally Hazardous Chemicals Act 1985 (NSW);

(f) any waste as defined in the Protection of the Environment Operations Act 1997 (NSW);

(g) any other substance or material as so characterised, listed or defined and regulated by any Environmental Law; and

(h) effluent, being any matter or thing, whether solid or liquid or a combination of solids and liquids, which is of a kind that may be removed from a septic tank, septic closet, chemical closet, sullage pit, grease trap or any holding tank or other container forming part of or used in connection with a septic tank, septic closet, chemical closet, sullage pit or grease trap.

WHS Legislation means legislation relating to health and safety at work including:

(a) the Work Health and Safety Act 2011 (NSW); and

(b) the Work Health and Safety Regulation 2011 (NSW).

WHS Plan means the work health and safety plan prepared by the Contractor and finalised under clause 9.6, which must:

(a) set out in adequate detail the procedures the Contractor will implement to manage the work under the Contract from a work health and safety perspective;

(b) describe how the Contractor proposes to ensure the work under the Contract is performed consistently with Laws in relation to work health and safety; and

(c) address the matters specified in clause 8.3.

Wilful Default means

(a) a deliberate act or omission, with knowledge that the act or omission will have harmful consequences, but does not include any innocent or negligent act or omission or any other act or omission to be done in good faith; or

(b) any fraudulent or criminal conduct.

Working Hours means:

(a) on any Business Day, the hours of 6am to 10pm; and

(b) on any non-Business Day, the hours of 10am to 2pm.

1.2 Rules for interpreting this Contract

Headings are for convenience only, and do not affect interpretation. The following rules also apply in interpreting this Contract, except where the context makes it clear that a rule is not intended to apply.
(a) A reference to:

(i) a legislative provision or legislation (including subordinate legislation) is to that provision or legislation as amended, re-enacted or replaced, and includes any subordinate legislation issued under it;

(ii) a document or agreement, or a provision of a document or agreement, is to that document, agreement or provision as amended, supplemented, replaced or novated;

(iii) a party to this Contract or to any other document or agreement includes a successor in title, permitted substitute or a permitted assign of that party;

(iv) a person includes any type of entity or body of persons, whether or not it is incorporated or has a separate legal identity, and any executor, administrator or successor in law of the person, an individual, body politic, the estate of an individual, a corporation, a statutory or other authority, a state, an association or a joint venture (whether incorporated or unincorporated), a partnership and a trust, and

(v) anything (including a right, obligation or concept) includes each part of it.

(b) A singular word includes the plural, and vice versa.

(c) A word which suggests one gender includes the other genders.

(d) If a word is defined, another part of speech for that word has a corresponding meaning.

(e) If an example is given of anything (including a right, obligation or concept), such as by saying it includes something else, the example does not limit the scope of that thing.

(f) Includes, including and similar words are not words of limitation.

(g) The word agreement includes an undertaking or other binding arrangement or understanding, whether or not in writing.

(h) The expression this Contract includes the agreement, arrangement, understanding or transaction recorded in this Contract.

(i) A reference to dollars or $ is to an amount in Australian currency, unless stated otherwise.

(j) If a person is a member of a GST group, references to GST for which the person is liable and to input tax credits to which the person is entitled include GST for which the representative member of the GST group is liable and input tax credits to which the representative member is entitled.

(k) References to GST extend to any notional liability of any person for GST and to any amount which is treated as GST under the GST Legislation, and references to an input tax credit extend to any notional input tax credit to which any person is entitled.
1.3 Non Business Days

If a person must do something under this Contract on or by a Business Day and the due date for performance is not a Business Day:

(a) if the act involves a payment that is due on demand, the person must do it on or by the next Business Day; and

(b) in any other case, the person must do it on or by the previous Business Day.

1.4 Multiple parties

If a party to this Contract is made up of more than one person, or a term is used in this Contract to refer to more than one party, then unless otherwise specified in this Contract:

(a) an obligation of those persons is joint and several; and

(b) a right of those persons is held by each of them severally.

1.5 The rule about "contra proferentem"

This document is not to be interpreted against the interests of a party merely because that party proposed this Contract or some provision in it or because that party relies on a provision of this Contract to protect itself.

2. PLRC

Each of TfNSW, PLRC and the Contractor acknowledges that PLRC:

(a) has entered into the Contract solely in its capacity as the party with the rights to operate the Sydney Light Rail, including ownership of the LRVs, Stabling Facility and LRT and to give access to the Stabling Facility, and for no other purpose;

(b) does not otherwise have the benefit of the undertakings and warranties given by the Contractor under this Contract; and

(c) this Contract does not create any duty, obligation or liability on the part of the Contractor to or in respect of PLRC which would not be created if PLRC was not a party to it.

2A NOVATION TO TFNSW NOMINEE

The parties acknowledge that:

(a) Subject to clause 2A(b), TfNSW may, at any time, elect to assign or novate its rights and obligations under the Contract to PLRC or any other nominee (TfNSW Nominee).

(b) If the TfNSW Nominee is not PLRC or another New South Wales Government agency, then TfNSW must obtain the prior written consent of the Contractor before appointing such nominee, which approval must not be unreasonably withheld if the proposed nominee is:

(i) reputable and has sufficient financial and operational capacity to perform the obligations of TfNSW under this Contract; and

(ii) not a competitor of the Contractor.
Subject to clause 2A(b), if TfNSW elects to assign or novate its rights and obligations under the Contract to a TfNSW Nominee:

(i) the Contractor consents to that assignment or novation;

(ii) the Contractor must promptly do all further acts and execute and deliver all further documents (in form and content reasonably satisfactory to TfNSW and TfNSW Nominee) to give effect to that assignment or novation.

(d) From the date of such assignment or novation to TfNSW Nominee:

(i) clause 2 and this clause 2A will be deleted; and

(ii) all references to "TfNSW" in the Contract will be deemed to be references to TfNSW Nominee.

3. FUNDAMENTAL OBLIGATIONS

3.1 Contractor's fundamental obligations

The Contractor must carry out the Services:

(a) on the terms of this Contract;

(b) in accordance with all applicable Legislative Requirements; and

(c) so that, subject to clause 13.2, the Required Number of Vehicles are Available at all times during the Term.

3.2 TfNSW's fundamental obligations

TfNSW will pay the Contractor the:

(a) Maintenance Fee; and

(b) other amounts due to the Contractor under this Contract,

subject to and in accordance with this Contract.

4. TERM

4.1 Term

(a) The Term commences on the Contract Effective Date and expires on the Expiry Date, unless terminated earlier;

(b) TfNSW must, within 5 Business Days after the date of the Contract, notify the Contractor in writing whether or not TfNSW elects to extend the Commencement Date to the date which is 6 months after the Contract Effective Date. If TfNSW does not notify the Contractor in accordance with this clause 4.1(b), the Commencement Date will not be extended.

4.2 Commencement of Services

(a) The Contractor must commence provision of the Services on the Commencement Date and, subject to the express provisions of this Contract, thereafter provide the Services throughout the Term.
(b) Notwithstanding clause 4.2(a), the Contractor must provide the services identified in the Transition Plan during the Mobilisation Period.

4.3 **Extended Expiry Date**

TfNSW may, at any time in the period between:

(a) 3 months prior to the Expiry Date; and
(b) 1 month prior to the Expiry Date,

give the Contractor written notice:

(c) that it proposes to extend the Term for a period of 3 years; and
(d) specifying:

   (i) that the notice is given under this clause 4.3; and
   (ii) any information it requires the Contractor to provide in relation to continuation of the Services following the Expiry Date.

4.4 **Further Extended Expiry Date**

TfNSW may, at any time in the period between:

(a) 3 months prior to the Extended Expiry Date; and
(b) 1 month prior to the Extended Expiry Date,

give the Contractor written notice:

(c) that it proposes to extend the Term for a period of 3 years; and
(d) specifying:

   (i) that the notice is given under this clause 4.4; and
   (ii) any information it requires the Contractor to provide in relation to continuation of the Services following the Further Extended Expiry Date.

4.5 **Final Expiry Date**

(a) TfNSW may, at any time in the period between:

   (i) 3 months prior to the Further Extended Expiry Date; and
   (ii) 1 month prior to the Further Extended Expiry Date,

give the Contractor written notice:

   (iii) that it proposes to extend the Term for a period of 1 year; and
   (iv) specifying:

      (A) that the notice is given under this clause 4.5(a); and
      (B) any information it requires the Contractor to provide in relation to continuation of the Services following the Final Expiry Date.

(b) TfNSW may exercise its rights under clause 4.5(a) more than once
4.6 If Term is extended

If the Term is extended (one or more times) in accordance with this clause 4:

(a) the Contractor must continue to perform the Services and otherwise comply with its obligations under this Contract; and

(b) TfNSW must continue to comply with its obligations under this Contract in respect of the Services,

until the end of the Term, except as agreed otherwise in writing by TfNSW and the Contractor.

5. SUPPLY CONTRACT

5.1 No relief

The Contractor:

(a) will not be relieved from any of its obligations or liabilities under this Contract or at law; and

(b) must not in any manner whatsoever assert any defence in connection with or otherwise avoid any Claim made by TfNSW under or pursuant to this Contract, as a result of:

(c) any defect or deficiency in a LRV;

(d) any breach of the Supply Contract by the Supplier; or

(e) any act or omission (including any negligent act or omission) of the Supplier in connection with the Supply Contract or the LRVs.

5.2 No Claims

The Contractor releases TfNSW from all Claims and any Loss suffered by the Contractor arising out of or in any way in connection with:

(a) a defect or deficiency in a LRV;

(b) any breach of the Supply Contract by the Supplier; or

(c) any act or omission (including any negligent act or omission) of the Supplier in connection with the Supply Contract or the LRVs.

6. SERVICES

6.1 Specification

The Contractor must perform the Services described in the Scope of Maintenance Services.

6.2 Services

Without limiting clause 6.1, the Services include:

(a) all work specifically referred to in or otherwise contemplated by this Contract;
(b) all items not specifically referred to or described in this Contract which nonetheless are required to complete the Services;

(c) all items referred to in the Scope of Maintenance Services or otherwise necessary for the Services to meet the standards required by this Contract but omitted from the Scope of Maintenance Services (those omitted items are included in the Services unless the context requires otherwise); and

(d) all items of work reasonably inferred from the Scope of Maintenance Services as necessary to properly execute and complete the Services.

6.3 Contractor’s obligations

Except as expressly provided in this Contract, the Contractor must provide all items of equipment, tools, spare parts and consumables required for the carrying out of the Services.

6.4 Contractor’s performance

The Contractor represents and warrants that:

(a) it has the skill, competence, experience and capability to perform the Services;

(b) it will perform the Services:

(i) with due skill, care and diligence;

(ii) using employees, agents and Subcontractors who are suitably qualified and experienced; and

(iii) using workmanship and materials of the highest standard which are fit for their purpose; and

(c) it has made full allowance in the Maintenance Fee for the matters referred to in this clause 6.

7. ACCESS

7.1 TfNSW grants access

(a) On and from the Commencement Date, TfNSW and PLRC will allow the Contractor sufficient access to the Stabling Facility and the LRT to enable the Contractor to carry out the Services on the terms set out in this Contract.

(b) When accessing the Stabling Facility or the LRT and carrying out the Services at the Stabling Facility or on the LRT, the Contractor must:

(i) comply with:

(A) all health and safety requirements and policies; and

(B) all other site requirements, of which notice has been given by TfNSW or the Operator to the Contractor; and

(C) the Operator’s directions (in its capacity as an Accredited operator);
(ii) not, and must ensure that its Subcontractors do not, use the Stabling Facility, LRT or the TfNSW Facilities for any purpose other than in connection with the Services; and

(iii) not disrupt the LRT or the operations of the Operator.

7.2 Access for TfNSW, the Operator and their authorised persons

The Contractor acknowledges and agrees that the Contractor's access to the Stabling Facility and the LRT under this Contract is not exclusive and that TfNSW, PLRC the Operator and their employees, contractors and agents may access the Stabling Facility and the LRT at any time for any purpose, including:

(a) inspecting and operating the LRT;
(b) maintaining the LRT or the Stabling Facility, including the TfNSW Facilities;
(c) inspecting and verifying the Contractor's performance of the Services; and
(d) performing work which is outside the scope of this Contract.

7.3 Co-operation

The Contractor must:

(a) fully cooperate with any person or persons carrying out work on or within the Stabling Facility, whether for TfNSW, PLRC or the Operator;
(b) promptly give all information and assistance reasonably necessary to any such person or persons so as to ensure safe access for those persons to the Stabling Facility;
(c) carefully coordinate and interface the Services with the work carried out by such person or persons; and
(d) perform the Services so as to avoid interfering with, disrupting or delaying the work of such person or persons.

7.4 No warranty by TfNSW

TfNSW and PLRC make no representations and give no warranty to the Contractor in respect of:

(a) the condition of:
   (i) the Stabling Facility;
   (ii) the LRT;
   (iii) the Specialist Maintenance Tools; or
   (iv) any structure or other thing on, above or adjacent to, or under the surface of, the Stabling Facility; or
(b) the existence, location, condition or availability of any Utility in respect of the Stabling Facility or LRT.
8. FACILITIES

8.1 TfNSW Facilities

(a) TfNSW and PLRC will supply to the Contractor the facilities set out in Annexure I at the Stabling Facility (TfNSW Facilities).

(b) The Contractor must:

(i) regularly remove from the Stabling Facility; and
(ii) immediately remove from the LRT, any Waste arising from the carrying out of the Services.

(c) Where necessary for the Contractor to carry out the Services, the Contractor may shunt a Vehicle within the Stabling Facility.

8.2 Specialist Maintenance Tools

TfNSW and PLRC will make available at the Stabling Facility the Specialist Maintenance Tools which the Contractor may use in carrying out the Services. Ownership of the Specialist Maintenance Tools will not transfer to the Contractor.

8.3 Other facilities

The Contractor:

(a) must obtain and pay for any facilities it requires to perform the Services (other than the TfNSW Facilities and Specialist Maintenance Tools), including any wheel lathe and milling machines required for the Services; and

(b) will be responsible for any such facilities.

9. LEGISLATIVE REQUIREMENTS AND AUTHORISATIONS

9.1 Legislative Requirements

The Contractor must:

(a) apply for and obtain all Authorisations required for the carrying out the Services;

(b) in carrying out the Services comply with all Legislative Requirements and Authorisations;

(c) give all notices necessary to comply with Legislative Requirements and any Authorisations; and

(d) pay all fees, charges and other imposts necessary to comply with the requirements of all Legislative Requirements and Authorisations.

9.2 Quality management


(b) TfNSW may, at any time, require the Contractor to demonstrate that it has been assessed and is registered as complying with AS/NZS ISO 9001:2008.
9.3 Registration and licences

(a) The Contractor must register all vehicles and any plant used in performing any part of the Services, if required by law to be registered.

(b) The Contractor must ensure that all drivers who operate any vehicle or plant in performing any part of the Services are properly and appropriately licensed as required by law to operate such vehicles or plant, including that any of the Contractor's Personnel who operate a Vehicle on the LRT or at the Stabling Facility have the appropriate licence.
9.5 Mitigation

The Contractor must minimise and mitigate the effect of any Qualifying Change in Law on the Services and the Contractor's obligations under this Contract.

9.6 Work Health and Safety

(a) In this Contract, unless the context otherwise indicates, in relation to any aspect of the performance of the work under this Contract that is the subject of a fitness for purpose warranty, a reference to the intended purpose requires, among other things, that work under this Contract, when completed, will comply with all health and safety requirements contained in the WHS Legislation.

(b) Without limiting clause 7, it is a condition precedent to TfNSW's and PLRC's obligations under clause 7 to provide the Contractor with access to the Stabling Facility that the Contractor has prepared and submitted a WHS Plan to TfNSW and TfNSW has had 20 Business Days to review the WHS Plan and has not rejected the WHS Plan.

(c) The Contractor shall:

(i) ensure that, if any Laws require that:

   (A) a person:
       (I) be authorised or licensed (in accordance with the WHS Legislation and the Rail Safety Act) to carry out any work at that workplace, that person is so authorised or licensed, and complies with any conditions of such authorisation or licence; and/or
       (II) has prescribed qualifications or experience or, if not, is to be supervised by a person who has prescribed
qualifications or experience (as defined in the WHS Legislation and as required by the Rail Safety Act), that person has the required qualifications or experience or is so supervised; or

(B) a workplace, plant or substance (or design), or work (or class of work) be authorised or licensed, that workplace, plant or substance, or work is so authorised or licensed;

(ii) not direct or allow a person to carry out work or use plant or substance at a workplace unless the requirements of subparagraph (i) are met (including any requirement to be authorised, licensed, qualified or supervised); and

(iii) if requested by TfNSW or required by the WHS Legislation, produce evidence of any approvals, certificates, authorisations, licences, prescribed qualifications or experience, or any other information relevant to work health and safety (as the case may be) to the satisfaction of TfNSW before the Contractor or subcontractor (as the case may be) commences such work.

(d) The Contractor shall carry out the work under this Contract:

(i) safely and in a manner that does not put the health and safety of persons at risk; and

(ii) in a manner that protects property.

(e) If TfNSW reasonably considers there is a risk to the health and safety of people or damage to property arising from the work under this Contract, TfNSW may direct the Contractor to change its manner of working or to cease working to the extent required to avoid or mitigate the risk to health and safety of people or damage to property and so as to not to prejudice the Contractor’s ability to comply with WHS Legislation.

(f) In this clause the terms ‘construction project’, ‘construction work’, ‘principal contractor’ and ‘workplace’ have the same meanings assigned to those terms under the WHS Legislation.

(g) Without limiting the Contractor’s obligations under any other provision of this Contract:

(i) the Contractor must provide prior written notice to TfNSW in respect of and to the extent that any work under this Contract includes construction work. Upon receipt of any notice under this subclause 9.6(g)(i) TfNSW:

(A) engages the Contractor as the principal contractor for the work under this Contract; and

(B) authorises the Contractor to have management and control of each workplace at which the work under this Contract is to be carried out and to discharge the duties of a principal contractor under the WHS Legislation; and

(ii) the Contractor accepts the engagement as principal contractor and agrees to discharge the duties imposed on a principal contractor by the WHS Legislation,
and the Contractor's engagement and authorisation as principal contractor will continue, subject to subparagraph (iv), until the expiry of this Contract unless sooner revoked by TfNSW taking over work under this Contract or terminating this Contract pursuant to any provision of this Contract or according to law.

(h) To the extent not prohibited by law, the Contractor indemnifies TfNSW against any damage, expense, loss or liability suffered or incurred by TfNSW arising out of or in connection with the failure of the Contractor to discharge the duties imposed on a principal contractor under the WHS Legislation or otherwise comply with this clause 9.6.

(i) The Contractor shall:

(i) ensure that in carrying out the work under this Contract:

(A) it complies with all Laws and other requirements of this Contract for work health, safety and rehabilitation management;

(B) all subcontractors and Consultants comply with the requirements referred to in this clause 9.6 and their respective obligations under the WHS Legislation and the Rail Safety Act; and

(C) it complies with its obligation under the WHS Legislation to consult, cooperate and coordinate activities with all other persons who have a work health and safety duty in relation to the same matter;

(ii) notify TfNSW immediately (and in any event within 12 hours of such matter arising) of all work health, safety and rehabilitation matters arising out of, or in any way in connection with, the work under this Contract;

(iii) institute systems to obtain regular written assurances from all subcontractors about their ongoing compliance with the WHS Legislation including the due diligence obligation contained therein;

(iv) provide the written assurances obtained pursuant to subparagraph (iii), together with written assurance(s) from the Contractor about the Contractor's ongoing compliance with the WHS Legislation, to TfNSW;

(v) cooperate with TfNSW to ensure that all parties are able to comply with their respective obligations under the WHS Legislation;

(vi) exercise a duty of the utmost good faith to TfNSW in carrying out the work under this Contract to enable TfNSW to discharge TfNSW's duties under the WHS Legislation;

(A) ensure that it does not do anything or fail to do anything that would cause TfNSW to be in breach of the WHS Legislation; and

(B) ensure its subcontracts include provisions equivalent to the obligations of this clause 9.6 (save for the engagement of the Contractor as principal contractor).

(j) Without limiting the Contractor's obligations under any other clause of this Contract, insofar as the Contractor, in carrying out the work under this Contract, is:

(i) a person conducting a business or undertaking that designs plant, substances or structures to whom section 22 of the Work Health and Safety Act 2011 (NSW) applies;
(ii) a person conducting a business or undertaking that manufactures plant, substances or structures to whom section 23 of the Work Health and Safety Act 2011 (NSW) applies;

(iii) a person conducting a business or undertaking that imports plant, substances or structures to whom section 24 of the Work Health and Safety Act 2011 (NSW) applies;

(iv) a person conducting a business or undertaking that supplies plant, substances or structures to whom section 25 of the Work Health and Safety Act 2011 (NSW) applies; or

(v) a person conducting a business or undertaking that installs, constructs or commissions plant or structures to whom section 26 of the Work Health and Safety Act 2011 (NSW) applies,

the Contractor shall comply with the applicable obligations under the WHS Legislation.

9.7 Rail Safety Act

(a) Without limiting any provision of this Contract, the Contractor must comply with the Rail Safety Act, including the general duties in section 9 of the Rail Safety Act.

(b) If the Contractor is required to be Accredited to carry out any Services, in carrying out those Services the Contractor must operate under the management and control of the Operator (in its capacity as an Accredited operator).

10. MAINTENANCE

10.1 General

The Contractor must carry out:

(a) from the Commencement Date:

(i) Scheduled Maintenance on the Variotrams in accordance with the Not Rejected Variotram Technical Maintenance Plan;

(ii) Scheduled Maintenance on the Signalling Equipment as specified in section 3.2 of the Scope of Maintenance Services; and

(iii) Unscheduled Maintenance on the Variotrams and Signalling Equipment.

(b) from Delivery of a LRV:

(i) Scheduled Maintenance on that LRV in accordance with the Not Rejected Technical Maintenance Plan; and

(ii) Unscheduled Maintenance on that LRV.

10.2 Relief Events

To the extent the Contractor can demonstrate, to the reasonable satisfaction of TfNSW, that Unscheduled Maintenance is required as a direct result of a Relief Event, that Unscheduled Maintenance will be deemed to be an Additional Service.
11. NOTIFICATION OF FAULTS, MALFUNCTIONS OR DAMAGE

11.1 Notification by TfNSW or Operator

(a) TfNSW will notify the Contractor upon becoming aware of any fault or malfunction in, or damage to, a Vehicle which in TfNSW’s reasonable opinion:

(i) causes the Vehicle to be Unavailable; or

(ii) does not cause the Vehicle to be Unavailable, but if the fault, malfunction or damage is left unattended may cause the Vehicle to be Unavailable.

(b) TfNSW must provide the Contractor with details of:

(i) the nature of the fault, malfunction or damage; and

(ii) to the extent known by TfNSW, the cause of the fault, malfunction or damage.

(c) The parties acknowledge and agree that notification by the Operator to the Contractor of any matter contemplated by paragraph (a) will be deemed to constitute a notice from TfNSW for the purposes of this clause 11.1.

11.2 Notification by the Contractor

(a) The Contractor must notify the Operations Control Centre if any Vehicle suffers a fault, malfunction or damage which causes that Vehicle to be Unavailable as soon as reasonably practical after it becomes aware of the fault, malfunction or damage.

(b) The Contractor must provide TfNSW with details of:

(i) the nature of the fault, malfunction or damage;

(ii) to the extent known by the Contractor, the cause of the fault, malfunction or damage; and

(iii) such other information as TfNSW or the Operator reasonably requires in relation to the fault, malfunction or damage or the general state of repair of that Vehicle.

12. CONTRACTOR’S STAFF AND TRAINING

12.1 Contractor’s staff

(a) The Contractor must:

(i) ensure, as a minimum, the following persons are available at the Stabling Facility at the following times:

(A) Monday to Friday:

(I) from 8am to 4.30pm, a Senior Service Engineer/Depot Manager; and

(II) from 6am to 10pm, Technician Tradesman; and

(B) Saturday, Sunday and Public Holidays from 10am to 2pm, a Technician Tradesman; and
at all times during the Term (24 hours a day, 7 days a week), ensure that TfNSW and the Operator have access to, including a telephone number for, a Technician Tradesman trained in the support of the Vehicles and Signalling Equipment and capable of assisting TfNSW and the Operator with:

(A) fault finding and troubleshooting assistance with the Vehicles and Signalling Equipment; and

(B) co-ordination of support services upon the occurrence of a Failure of a Vehicle on the LRT,

including, where the Contractor's Technician Tradesman is unable to provide assistance remotely, attending the Vehicle or Signalling Equipment within 60 minutes from the time of the fault or Failure.

(b) With the prior agreement of TfNSW, the Contractor may change the hours and/or manning levels set out in paragraph (a) as required in order meet shifting peaks in the operation of the LRT or deal with Special Events. TfNSW's agreement to a change in the hours and/or manning levels set out in paragraph (a) may be given subject to conditions.

12.2 Training the Operator

The Contractor must provide technical training to the Operator in accordance with the Section 6 of the Scope of Maintenance Services to ensure the Operator's personnel are competent to make appropriate decisions in respect of a Failure of a Vehicle on the LRT.

13. AVAILABILITY

13.1 Availability Payment

(a) Subject to clause 13.2, if the Required Number of Vehicles are not Available at any time during the Term, the Contractor must pay TfNSW an Availability Payment in accordance with Annexure F.

(b) Subject to paragraph (c), neither:

(i) the Contractor's obligation to pay the Availability Payment; nor

(ii) the payment by the Contractor of the Availability Payment or the setting off by TfNSW of the Availability Payment against any moneys otherwise due to the Contractor,

will lessen or affect:

(iii) the Contractor's liabilities or responsibilities under this Contract or otherwise according to law; or

(iv) TfNSW's rights against the Contractor, whether under this Contract or otherwise according to law.

(c) Where the Contractor pays the Availability Payment or TfNSW sets off the Availability Payment against any moneys otherwise due to the Contractor, TfNSW waives any right to damages for breach of this Contract arising from the Contractor's failure to have the relevant Vehicle Available.
13.2 Relief

The Contractor will not be required to pay TfNSW an Availability Payment to the extent the Contractor can demonstrate to the reasonable satisfaction of TfNSW that a Shortfall has occurred as a direct result of a Relief Event.

13.3 Availability Event

(a) Subject to paragraph (b), where a Vehicle is Unavailable and:

(i) TfNSW has notified the Contractor in accordance with clause 11.1; or

(ii) the Contractor has notified the Operations Control Centre in accordance with clause 11.2,

for the purposes of calculating any Availability Payment, the Vehicle will be Unavailable from the time of the notice pursuant to clause 11.1 or 11.2 (as applicable) until the Contractor can demonstrate to the reasonable satisfaction of TfNSW and the Operator that the relevant Vehicle is at the Stabling Facility and is Available.

(b) If a Vehicle suffers a Failure on the LRT (other than at the Stabling Facility):

(i) the Contractor must use best endeavours to return that Vehicle to the Stabling Facility as soon as possible; and

(ii) for the purposes of calculating any Availability Payment, the Vehicle will be Unavailable from the time it arrives at the Stabling Facility until the Contractor can demonstrate to the reasonable satisfaction of TfNSW and the Operator that the relevant Vehicle is at the Stabling Facility and is Available.

13.4 Maximisation of Vehicles Availability

Without prejudice to the Maintenance Plans, the Contractor must use all reasonable endeavours to carry out the Services and comply with its obligations under this Contract in a manner that, at all times, maximises the number of Vehicles that are Available.

13.5 Special Events

(a) TfNSW will, no later than 20 Business Days prior to the beginning of each Contract Year, provide the Contractor with a list of Special Events for that Contract Year, including details of each Special Event and any change to the Required Number for the period of each Special Event (Special Event Requirements).

(b) If required by TfNSW, the Contractor must meet with TfNSW at the beginning of each Contract Year or such other time as is required by TfNSW to:

(i) review planning in respect of a Special Event or Special Events;

(ii) discuss any change to the Required Number for the period of the Special Event; or

(iii) discuss any other issue relating to a Special Event considered necessary by TfNSW,

provided always that TfNSW may direct the Contractor as to the terms of the Special Event Requirements.
(c) TfNSW may, at any time add or remove a Special Event from the list of Special Events or change any Special Event Requirements, provided that it must give the Contractor at least 20 Business Days prior notice of any such change.

(d) The Contractor must comply with the Special Event Requirements. The Contractor acknowledges and agrees that complying with the Special Event Requirements, including any change to the Required Number for the period of a Special Event, will not entitle the Contractor to make any Claim against TfNSW or relieve the Contractor from any obligations or liabilities under this Contract.

14. SPARE PARTS

14.1 Initial Maintenance Spares

On the Commencement Date, TfNSW will deliver the Initial Maintenance Spares to the Contractor (delivery may include making the Initial Maintenance Spares available to the Contractor at the Stabling Facility), at which time ownership in the Initial Maintenance Spares will transfer to the Contractor.

14.2 Maintenance Spares

(a) The Contractor must hold at the Stabling Facility the Maintenance Spares.

(b) The Contractor must replace any Maintenance Spares used in carrying out the Services. The replacement Maintenance Spare must be:

(i) an appropriate replacement provided by the OEM; or

(ii) a like-for-like replacement of the used Maintenance Spare (of equal to or higher specification, durability and quality as the used Maintenance Spare and fit for the relevant purpose),

and be new or, subject to prior agreement by TfNSW, repaired, reconditioned or refurbished.

14.3 Ownership of Maintenance Spares

Maintenance Spares will be owned by the Contractor until:

(a) instalment of the relevant Maintenance Spare on a Vehicle or the Signalling Equipment (as applicable); or

(b) delivery by the Contractor of the Maintenance Spares to TfNSW in accordance with clause 36.4(c),

at which time ownership in that Maintenance Spare will transfer to TfNSW.

14.4 Ownership of worn, failed or damaged Maintenance Spares

(a) The Contractor owns any Maintenance Spare removed from a Vehicle or the Signalling Equipment.

(b) The Contractor must remove from the Stabling Facility any Maintenance Spare removed from a Vehicle or the Signalling Equipment which is not repairable. The Contractor is responsible for any costs incurred in the removal and disposal of the Maintenance Spares.
14.5 TfNSW Spares
(a) TfNSW owns the TfNSW Spares.
(b) Where the Contractor requires a TfNSW Spare in order to fulfil its obligations under this Contract, TfNSW will make the relevant TfNSW Spare available to the Contractor for use in carrying out the Services.
(c) The Contractor must replace any TfNSW Spare used in carrying out the Services. The replacement TfNSW Spare must be:
(i) an appropriate replacement provided by the OEM; or
(ii) a like-for-like replacement of the used TfNSW Spare (of equal to or higher specification, durability and quality as the used TfNSW Spare and fit for the relevant purpose),

and be new or, subject to prior agreement by TfNSW, repaired, reconditioned or refurbished.

14.6 Ownership of worn, failed or damaged TfNSW Spares
(a) The Contractor must notify TfNSW of any TfNSW Spare removed from a Vehicle or the Signalling Equipment.
(b) TfNSW owns any TfNSW Spares removed from a Vehicle or the Signalling Equipment.
(c) Unless otherwise directed by TfNSW, the Contractor must remove from the Stabling Facility and safely dispose of any TfNSW Spare removed from a Vehicle or the Signalling Equipment which is not repairable. The Contractor is responsible for any costs incurred in the removal and disposal of the TfNSW Spares.

14.7 Obsolescence
(a) The Contractor must:
(i) notify TfNSW as soon as it becomes aware that a particular Maintenance Spare or TfNSW Spare is no longer available and there is no like-for-like replacement (Obsolete Spare);
(ii) source a replacement part or component that is of comparable specification and quality to the Obsolete Spare and is fit for the purpose for which the Obsolete Spare was used; and
(iii) subject to clause 14.7(c), carry out any engineering re-design of the Vehicle or the Signalling Equipment (as applicable) as is reasonably necessary to allow the use of the replacement part or component on the Vehicle or the Signalling Equipment (as applicable).

(b) If the Obsolete Spare was a Maintenance Spare or TfNSW Spare specific to the Variotrams or Signalling Equipment, the Contractor will be entitled to recover from TfNSW the costs necessarily and unavoidably incurred by the Contractor in carrying out any engineering re-design to the Vehicle or the Signalling Equipment (as applicable) pursuant to clause 14.7(a)(iii). In all other instances the Contractor is responsible for any costs it incurs in complying with this clause 14.7.
(c) The Contractor is not required to comply with clause 14.7(a)(iii) unless TfNSW provides a warranty to the Contractor that the work required for the Contractor to
comply with clause 14.7(a)(iii) will not infringe any third party’s Intellectual Property Rights.

14.8 Cost of replacing Maintenance Spares and TfNSW Spares

(a) Subject to paragraph (b), the Contractor must replace at its cost all Maintenance Spares and TfNSW Spares used in carrying out the Services.

(b) TfNSW will pay the Contractor the cost of procuring a replacement Maintenance Spare or TfNSW Spare (as the case may be) to the extent the Contractor is required to use a Maintenance Spare or TfNSW Spare as a direct result of a Relief Event.

15. ENDEMIC FAILURES

15.1 Investigation

(a) The Contractor must, at its cost, investigate each Endemic Failure as soon as reasonably practical after it becomes aware of an Endemic Failure.

(b) The Contractor must provide TfNSW with details of:

(i) the nature of the Endemic Failure;

(ii) to the extent known by the Contractor, the cause of the Endemic Failure; and

(iii) such other information as TfNSW or the Operator reasonably requires in relation to the Endemic Failure or the general state of repair of the relevant LRVs.

15.2 Further investigation

(a) If directed by TfNSW, the Contractor must, at its cost, investigate each LRV (whether or not the LRV has suffered the Endemic Failure) to assess the condition of any part(s) or component(s) the subject of the fault, malfunction or failure giving rise to the Endemic Failure.

(b) The Contractor must provide TfNSW with details of the results of this investigation, including:

(i) the condition of those part(s) or component(s) the subject of the fault, malfunction or failure giving rise to the Endemic Failure in:

(A) those LRVs that suffered the Endemic Failure; and

(B) those LRVs that have not suffered the Endemic Failure; and

(ii) such other information as TfNSW or the Operator reasonably requires in relation to those part(s) or component(s) the subject of the fault, malfunction or failure giving rise to the Endemic Failure or any of the LRVs.

15.3 Repair of Endemic Failures

(a) The Contractor must:

(i) in those LRVs that suffered the Endemic Failure, replace the part(s) or component(s) the subject of the fault, malfunction or failure giving rise to
the Endemic Failure and otherwise carry out all repairs and maintenance necessary to rectify the Endemic Failure; and

(ii) if requested by TfNSW, in those LRVs that have not suffered the Endemic Failure, replace the part(s) or component(s) the subject of the fault, malfunction or failure giving rise to the Endemic Failure.

(b) Subject to paragraph (c), the Contractor must carrying out any inspection, repairs or other works required under this clause 15 at its cost.

(c) To the extent the Contractor can demonstrate to the reasonable satisfaction of TfNSW that the Endemic Failure occurred as a result of a Relief Event the Contractor will be entitled to be paid in accordance with clause 16.3 for the costs it incurs in carrying out any inspection, repairs or other works under this clause 15.

16. ADDITIONAL SERVICES

16.1 Additional Services

The parties acknowledge and agree that during the Term:

(a) TfNSW may, in its absolute discretion:

(i) seek a price from the Contractor to undertake Additional Services;

(ii) direct the Contractor to undertake Additional Services; or

(iii) engage another contractor to undertake works or services on the Vehicles, the LRT or the Stabling Facility; and

(b) TfNSW is under no obligation to engage the Contractor to undertake Additional Services.

16.2 TfNSW may direct

At any time during the Term, TfNSW may in writing direct the Contractor to undertake Additional Services and the Contractor must comply with those directions.

16.3 Valuation of Additional Services

The Additional Services will be valued in accordance with Annexure H of this Contract.

16.4 Performance of Additional Services

The Contractor acknowledges that it must take all reasonable steps to carry out Additional Services concurrently with the Services wherever possible and to minimise the effects of the Additional Services on the performance of the Services.

16.5 Liability for other contractors performing Additional Services

To the extent that another contractor engaged by TfNSW pursuant to clause 16.1(a)(iii) to undertake Additional Services causes any damage or disruption to the Contractor in carrying out the Services, the Contractor will be entitled to submit a request for Variation under clause 17 with respect to such damage or disruption to the Contractor carrying out the Services.
17. VARIATIONS

17.1 Variation
This clause 17 applies if TfNSW at any time by written notice to the Contractor requests a Variation.

17.2 Contractor's response
(a) Within 20 Business Days of receipt of a request for a Variation, the Contractor must advise TfNSW in writing of:
   (i) the cost and quality implications (if any) of the Variation; and
   (ii) any other effect on the Services or on any matter specified in the Variation.

(b) In advising TfNSW of its effect on the Services, the Contractor acknowledges its responsibility to take all reasonable steps to:
   (i) carry out any additional work or services associated with the proposed Variation concurrently with the Services wherever possible; and
   (ii) otherwise minimise the effect of the Variation on the carrying out of the Services.

17.3 Effect of Variations
(a) The parties must seek to agree the cost, time and quality implications and other effects (if any) on the Services of a Variation.

(b) If the parties are unable to agree on the matters specified in paragraph (a) within 40 Business Days of the date of TfNSW's request for the Variation, then TfNSW may require the disputed matters relating to the Variation to be determined in accordance with clause 37.

(c) The Contractor must not implement a proposed Variation until:
   (i) the parties have agreed on its cost and quality implications and other effects (if any) on the Services; or
   (ii) any disputed matters relating to the Variation (as the case may be) have been determined pursuant to clause 37.

17.4 Carrying out a Variation
In carrying out a Variation, the Contractor must:
(a) carry out any additional work or services associated with the Variation concurrently with the Services wherever possible; and

(b) otherwise minimise the effect of the Variation on the performance of the Services.

17.5 Claim for Variation
Regardless of any other provision of this Contract, if the Contractor considers that a direction issued by (or on behalf of) TfNSW constitutes a Variation, the Contractor must before complying with the direction:
(a) notify TfNSW in writing that it considers the direction to be a Variation; and
(b) provide TfNSW with the details relating to the proposed Variation required pursuant to clause 17.2(a).

18. PAYMENT

18.1 Payment

(a) Subject to the Contractor satisfying the requirements in this clause 18 and any right of TfNSW to withhold or set off any part of the payment in accordance with this Contract, TfNSW will pay the Contractor for carrying out the Services:

(i) the Monthly Service Payment; and
(ii) the Additional Services Payment,

in arrears in accordance with the provisions of this Contract.

(b) Except as expressly provided in this Contract, where the Contractor is obliged to do anything under this Contract:

(i) it must do so at no additional cost to TfNSW; and
(ii) the only consideration the Contractor is entitled to for carrying out the Services is payment of the amounts specified in paragraph (a).

18.2 Payment claims

(a) During the Term, the Contractor may submit a payment claim to TfNSW no earlier than 8 Business Days after the end of each month in respect of those Services for which it is entitled to payment.

(b) Each payment claim must:

(i) be in such form as is acceptable to TfNSW;
(ii) identify the Services to which the payment claim relates;
(iii) be supported by any information reasonably required by TfNSW; and
(iv) be accompanied by:

(A) all relevant calculations and other information required for assessment of the payment claim;
(B) the Monthly Performance Report and Monthly Maintenance Report; and
(C) a valid tax invoice for the amount in the payment claim.

(c) Within 30 Business Days of the date of receipt of a payment claim (including the documents and information referred to in paragraph (b) above), TfNSW will pay to the Contractor the amount assessed by TfNSW as payable under this Contract in respect of that payment claim, less any amount which TfNSW is entitled to set off under the Contract.

(d) If TfNSW disputes any amount shown in a payment claim:

(i) it must pay the undisputed portion of that payment claim within the time prescribed by paragraph (c) above; and
liability for the disputed portion of that payment claim will be determined in accordance with the dispute resolution procedure set out in clause 37.

18.3 Payment on account

(a) No payment by TfNSW to the Contractor will be:

(i) evidence of the value of the Services;

(ii) an admission of liability;

(iii) an admission that the Services have been executed satisfactorily or meets any standard, including any standard of fitness for purpose, which the Contractor has agreed to achieve under this Contract; or

(iv) approval by TfNSW of the Contractor's performance or compliance with this Contract,

but will be a payment on account only, and will not prejudice any rights or powers of TfNSW whether under this Contract or otherwise according to law.

(b) A payment made under this Contract does not prejudice the right of either party to dispute the amount properly due and payable. If the amount determined to be due and payable differs from that paid, the difference between the amount paid and the amount which was properly due and payable will be payable or repayable, as the case may be, as a debt due.

18.4 Correction of payment schedule

TfNSW may at any time correct any error which has been discovered in a payment schedule or in any payment under this Contract.

18.5 Interest on Late Payment

If a party fails to pay any amount under this Contract by the date on which it becomes due and payable, that party will be liable for interest on any such overdue amount which will accrue from and including the due date for payment up to and including the actual date of payment at the Overdue Rate.

18.6 Availability Payment

The Contractor acknowledges and agrees that:

(a) each Availability Payment does not exceed a genuine pre-estimate of the Loss to TfNSW of the Required Number of Vehicles not being Available at the relevant time;

(b) both TfNSW and the Contractor require a formula for calculation of that Loss that is able to be readily applied without unnecessary administrative costs, delay or difficulty;

(c) to the extent permissible:

(i) it excludes and expressly waives any right of the benefit of the application of any legal rule or norm, including under statute, equity and common law, relating to the characterisation of the Availability Payment payable under this Contract as a penalty, or the enforceability or recoverability of the Availability Payment or any related provision of this Contract;
(ii) if any provision of this Contract is found for any reason to be void, invalid or otherwise so as to disentitle TfNSW from the Availability Payment, the Contractor will be liable for any Loss incurred by TfNSW as a result of the Contractor failing to comply with the relevant requirements of this Contract, but the Contractor's liability for such Loss (whether in respect of an individual occurrence or in aggregate) will not be any greater or different than the liability which it would have had if the provision had not been void, invalid or otherwise inoperative; and

(iii) clause 30.2 does not exclude or limit any Availability Payment.

18.7 Deductions and set off

(a) TfNSW may deduct from any payment of the Maintenance Fee or any other payment under this Contract:

(i) any debt due or other amount payable by the Contractor to TfNSW (including any Availability Payment calculated in accordance with this Contract); or

(ii) any bona fide claim to money which TfNSW may have against the Contractor, whether for damages or otherwise,

whether under this Contract or any other contract between TfNSW and the Contractor.

(b) The Contractor must make all payments due to TfNSW under this Contract without set-off or counterclaim, and without any deduction to the extent permitted by law.

(c) Nothing in this clause 18.7 affects the TfNSW's right to recover from the Contractor the whole of the debt or any balance that remains owing after any set-off.

19. INTELLECTUAL PROPERTY RIGHTS

19.1 Existing Maintenance History Information

The Contractor acknowledges that TfNSW has provided to it the Existing Maintenance History Information.

19.2 Further requirements

(a) The Contractor will include on all Maintenance History Information such notices in relation to TfNSW's licence of the Intellectual Property Rights as TfNSW requires.

(b) The Contractor must ensure, and warrants, that it will obtain from all holders of Moral Rights in any Maintenance History Information or other materials provided by, or on behalf of, the Contractor under this Contract, consent to the following specific acts or omissions by TfNSW and its successors, assigns or sub-licensees:

(i) reproducing, publishing, adapting, changing or communicating the Maintenance History Information and other materials to the public without attributing their authorship or otherwise identifying the author of the Maintenance History Information and other materials; and

(ii) subjecting the Maintenance History Information and other materials to derogatory treatment.
19.3 Licence by TfNSW of Existing Maintenance History Information

(a) To the extent permitted by Law, TfNSW grants to the Contractor an irrevocable, non-exclusive, royalty free, non-transferable licence for the Term:

(i) to use; and

(ii) subject to the TfNSW's prior written consent, reproduce, add to and modify,

TfNSW's rights in respect of the Existing Maintenance History Information for the sole purpose of performing the Contractor's obligations under this Contract.

(b) The Contractor may sub-license its rights set out in paragraph (a) to Subcontractors for the sole purpose of the Subcontractor performing its obligations under the relevant Subcontract. The Contractor may not sublicense its right to sublicense except with TfNSW's prior written consent.

19.4 Licence by Contractor

(a) The Contractor owns or is licensed to use all Intellectual Property Rights in the Maintenance Procedure Information, the CAMS and the Asset Register.

(b) The Contractor grants to TfNSW, on creation, an irrevocable, non-exclusive, royalty free, transferable licence to:

(i) use;

(ii) reproduce, add to and modify; and

(iii) sub-license others to use, reproduce, add to and modify,

Intellectual property Rights in the Maintenance Procedure Information, the CAMS and the Asset Register on creation for any purposes.

(c) The licence in paragraph (b) survives termination or expiry of this Contract.

19.5 Contractor warranty

(a) The Contractor warrants to TfNSW that:

(i) it will not infringe the Intellectual Property Rights or Moral Rights of any person in performing the Services or its other obligations under this Contract;

(ii) it has sufficient rights to license Intellectual Property Rights on the terms set out in this clause 19; and

(iii) use of:

(A) the CAMS;

(B) the Asset Register;

(C) the Maintenance History Information;

(D) the Maintenance Procedure Information; or

(E) any other materials provided by the Contractor under this Contract to TfNSW,
will not infringe any Intellectual Property Rights of third parties.

(b) The warranty in paragraph (a) will be repeated by reference to the circumstances then subsisting at the date any licences or rights are granted under this clause 19.

(c) If the Contractor becomes aware of a breach or possible breach of the warranty given by it under paragraph (a), the Contractor must, at its cost, following consultation with TfNSW, take all actions approved by TfNSW to facilitate TfNSW's continued use of the relevant material as contemplated by this Contract.

20. PROJECT PLANS

20.1 Preparation and submission of Project Plans

(a) Within the time stated in the table in Part B of Annexure A applicable to a Project Plan, the Contractor must prepare and submit three hard copies and one electronic copy (in native and PDF formats) of the Project Plan to TfNSW for review and comment.

(b) The Contractor must ensure that the Project Plans are submitted under paragraph (a):

(i) comply with the requirements of this Contract;

(ii) are consistent with the outline Project Plans set out in 0;

(iii) are submitted in a form approved by TfNSW;

(iv) are submitted progressively and in a timely manner in accordance with Annexure A; and

(v) are submitted in a manner which, having regard to the quantum of Project Plans submitted, will allow TfNSW a reasonable opportunity to review the Project Plans within the timeframes contemplated by this Contract.

20.2 Review of Project Plans by TfNSW

(a) TfNSW may review any Project Plan submitted under this clause 20 and may (but is not obliged to) make comments to the Contractor in respect of a Project Plan.

(b) Within 20 Business Days of the Contractor submitting the Project Plan TfNSW may notify the Contractor that:

(i) the Project Plan is "Not Rejected";

(ii) the Project Plan is "Not Rejected Subject to Comments", if TfNSW has no objection to the Contractor adopting the Project Plan subject to the Contractor addressing to TfNSW's satisfaction the comments made by TfNSW; or

(iii) the Project Plan is "Rejected", if:

(A) in the reasonable opinion of TfNSW, the Project Plan does not comply with the requirements of this Contract; or

(B) the Project Plan is not consistent with corresponding outline Project Plan (if any) set out in 0,

and provide written reasons for the rejection.
(c) The Contractor must, within 10 Business Days (or as agreed with TfNSW) of receipt of notice from TfNSW that any Project Plan is "Rejected" submit an amended Project Plan to TfNSW and the provisions of this clause 20.2 will reapply to the amended Project Plan.

(d) If TfNSW does not issue a notice under paragraph (b) within the required timeframes, the relevant Project Plan will be deemed to be "Not Rejected".

20.3 Contractor to assist TfNSW

The Contractor must, if required by TfNSW, ensure that appropriate personnel are available to:

(a) explain any Project Plan submitted to TfNSW under this clause 20; and

(b) provide such information regarding that Project Plan as TfNSW reasonably requests.

20.4 Updating the Project Plan

(a) The Contractor must review and, if necessary, update the Project Plans:

(i) as required to take account of events or circumstances which will, or may, affect the manner in which the Contractor carries out its obligations under this Contract;

(ii) when directed to do so by the TfNSW; and

(iii) at the times stated in the table in Part B of Annexure A.

(b) All updated Project Plans must be submitted for review in accordance with this clause 20.

(c) Without limiting clause 20.4(a), must within 30 days after the date of the Contract update the Annexures to the Contract as reasonably required by TfNSW to remove historical references to documentation submitted with its tender.

20.5 Compliance with Project Plans

(a) The Contractor must:

(i) at all times comply with the Not Rejected Project Plans; and

(ii) ensure that its employees, agents and subcontractors comply with the Not Rejected Project Plan.

(b) The Contractor agrees that complying with the Not Rejected Project Plans will not in any way lessen or affect:

(i) its liabilities or responsibilities under this Contract or otherwise according to law; or

(ii) TfNSW's rights against the Contractor, whether under the Contract or otherwise according to law.
21. TFNSW'S REVIEW OF PROJECT PLANS

21.1 No restriction on TfNSW's rights

TfNSW and the Contractor acknowledge and agree that:

(a) TfNSW does not owe a duty to the Contractor:
   (i) to review the Project Plans submitted by the Contractor to TfNSW for errors or compliance with the requirements of this Contract;
   (ii) in any review undertaken of the Project Plans; or
   (iii) to consult with the Contractor or to make any comments regarding the Project Plans;

(b) TfNSW's review or rejection of, or consultation or comments on, or any other direction or act or omission with respect to the Project Plans (including any failure by TfNSW to review, reject, consult or comment regarding the Project Plans), will not lessen or otherwise affect:
   (i) any of the Contractor's obligations or liabilities under this Contract or according to law; or
   (ii) TfNSW's rights against the Contractor under this Contract or according to law; and

(c) TfNSW's exercise of (or failure to exercise) its rights under clause 20.2 will not preclude TfNSW from subsequently asserting that the Project Plan does not comply with the requirements of this Contract (even if TfNSW previously gave a "Not Rejected" or "Not Rejected Subject to Comments" notice under clause 20.2 in respect of the Project Plan).

21.2 No relief

(a) The Contractor will not be relieved from any of its obligations under this Contract or from any of its liabilities under this Contract or according to law as a result of:
   (i) complying with its obligations under clause 20 to develop, amend, update and submit to TfNSW the Project Plans; or
   (ii) TfNSW, or anyone acting on behalf of TfNSW, failing to detect any non-compliance in the Project Plans or the Contractor's obligations under clause 20, including where any failure arises from any negligence on the part of TfNSW, anyone acting on behalf of TfNSW or any other person.

(b) The Contractor complying with its obligations under clause 20 is not evidence of the Contractor complying with its other obligations under this Contract.

22. REPORTING AND PROVISION OF INFORMATION

22.1 Reports

The Contractor must provide to TfNSW:

(a) the reports set out in Annexure D:
   (i) in accordance with the requirements of Annexure D; or
(ii) with such adjustments to frequency, format or details as directed by TfNSW; and

(b) any other reports reasonably requested by TfNSW within the time directed by TfNSW,

(together the Reports and each a Report).

22.2 Contractor's warranty

(a) The Contractor represents and warrants that each Report, whether collected by or on behalf of the Contractor, will be accurate and comply with the requirements of this Contract.

(b) The warranty contained in this clause 22.2 survives the expiry or termination of this Contract.

22.3 Location of maintenance information

The Contractor must keep Maintenance Procedure Information and Maintenance History Information at the Stabling Facility.

22.4 Obligation to provide Maintenance History Information

Without limiting clause 22.1, the Contractor must:

(a) give TfNSW access to Maintenance History Information at all reasonable times;

(b) provide Maintenance History Information in a readable format acceptable to TfNSW;

(c) ensure the availability and continuous integrity of the Maintenance History Information;

(d) ensure that the Maintenance History Information is accurate; and

(e) keep a copy of all Maintenance History Information for the Term and thereafter for a period of no less than 12 months from the end of the Term and the Contractor must not dispose of any Maintenance History Information during such period unless with the prior written consent of TfNSW.

22.5 Obligation to provide Maintenance Procedure Information

The Contractor must provide Maintenance Procedure Information to TfNSW when reasonably required by TfNSW for the operation of the Vehicles or LRT.

22.6 Obligation to provide further information

The Contractor must provide any information:

(a) reasonably requested by TfNSW which will assist in the inquiry into any incident which may occur on or about the LRT or the Stabling Facility or that involves a Vehicle, including any Failure of a Vehicle; and

(b) reasonably required by TfNSW or the Operator (in its capacity as an Accredited operator) to respond to ITSR.
23. CAMS AND ASSET REGISTER

23.1 CAMS

The Contractor must establish, implement and maintain a CAMS which must comply with the requirements of this Contract, including Annexure E.

23.2 Access to CAMS

(a) The Contractor must provide TfNSW, including no less than four persons nominated by TfNSW, with sufficient access to the CAMS to enable it to audit, inspect and carry out surveillance:

(i) of the Contractor's performance under this Contract, including compliance with its obligations in relation to the CAMS; and

(ii) to check that the CAMS complies with the requirements set out in Annexure E.

(b) The persons nominated by TfNSW must be able to have access to the CAMS online at any time.

(c) TfNSW will provide written notice to the Contractor confirming the details of the persons it nominates to have access to the CAMS pursuant to paragraph (a).

(d) TfNSW may, at any time, by written notice to the Contractor replace a person it has nominated to have access to the CAMS with another person nominated by TfNSW. Once access to the CAMS has been given to the replacement person nominated by TfNSW, the Contractor may cancel the access rights to the CAMS of the TfNSW nominee that has been replaced.

23.3 Asset Register

The Contractor must establish and maintain an Asset Register.

24. AUDIT

24.1 TfNSW's rights

Without limiting any other provisions of this Contract, TfNSW and any other person authorised by TfNSW may, on 2 Business Days' notice and at TfNSW's cost:

(a) subject to the Contractor's reasonable safety and security constraints, enter the premises of the Contractor or any Subcontractor for the purposes of observing the performance of the Contractor's obligations under this Contract and monitoring compliance by the Contractor with its obligations under this Contract;

(b) at any time up to 12 months from the end of the Term, carry out an audit of the Contractor's documents and other records (other than Commercially Sensitive Information which the Contractor is not otherwise required to disclose under this Contract) it has related to the Services to the extent reasonably necessary to:

(i) verify the Contractor's performance of its obligations under this Contract; and

(ii) audit the Performance Data and each Report; and
24.2 Contractor must assist

The Contractor must:

(a) give TfNSW and any other person authorised by TfNSW access to all records relating to the Services to the extent necessary to enable an audit as contemplated by clause 24.1;

(b) allow TfNSW and any other person authorised by TfNSW to have access to the premises and personnel of the Contractor and any of its Subcontractors to the extent necessary to carry out any inspection or audit;

(c) provide TfNSW and any other person authorised by TfNSW with such assistance as they may reasonably require in connection with their inspection or audit, including making documents available and, at the reasonable cost of TfNSW, installing and operating any compatible audit software; and

(d) supply to TfNSW and any other person authorised by TfNSW, at the reasonable cost of TfNSW, photocopies or electronic copies of information requested.

24.3 Audit of Monthly Performance Report

If an audit of any Monthly Performance Report reveals an error in, or inaccuracy of, the Monthly Performance Report or any Performance Data the Contractor must:

(a) fix the inaccuracy or error and reissue to TfNSW the corrected Monthly Performance Report;

(b) use the corrected Performance Data or Monthly Performance Report (as applicable) to:

(i) reassess the occurrence or extent of any Unavailable Vehicle; and

(ii) recalculate any Availability Payment, affected by the error or inaccuracy in the Monthly Performance Report or Performance Data;

(c) pay an amount to TfNSW equal to the difference between the reassessed Availability Payment and original Availability Payment together with interest at the Default Rate; and

(d) pay the costs of the audit incurred by TfNSW.

25. SUBCONTRACTING

25.1 Contractor’s responsibility

The Contractor is solely responsible for:

(a) the Subcontractors and the Subcontractor’s subcontractors, consultants and suppliers (of any tier in the contracting chain) and each of their officers, employees and agents; and

(i) the consequences of the termination of any Subcontract.
(b) The Contractor will be liable to TfNSW for the acts, defaults and omissions of its Subcontractors and the Subcontractor's subcontractors, consultants and suppliers (of any tier in the contracting chain) and each of their officers, employees and agents as if they were an act, default or omission of the Contractor.

The Contractor's obligations under this Contract are not lessened or otherwise affected by subcontracting the performance of those obligations.

25.2 Consent

(a) The Contractor must not:

(i) subcontract any part of its obligations under this Contract where the Subcontract would have a contract value of $500,000 or greater; or

(ii) allow the Subcontractor of any Subcontract with a contract value of $500,000 or greater to assign or subcontract the services under that Subcontract, except with the consent of TfNSW (such consent may be withheld in TfNSW's absolute discretion and, if given, may be given with conditions).

(b) The Contractor acknowledges that any consent given by TfNSW pursuant to paragraph (a) does not release the Contractor from any of its obligations under this Contract.

25.3 Subcontract provisions

(a) The Contractor must ensure that a clause equivalent to clause 30.3 is included in each Subcontract.

(b) The Contractor must ensure that each Subcontract includes the following:

(i) provisions to allow the novation of each Subcontract to TfNSW in the circumstances contemplated by clause 35.2(a)(iii); and

(ii) provisions to allow access for TfNSW and its authorised persons to the information and records of each Subcontract as necessary for the Contractor to comply with its obligations under this Contract.

25.4 Removal of persons

(a) TfNSW may direct the Contractor to remove from the Stabling Facility and the LRT or from any activity connected with the Services, within such time as TfNSW may direct, any person employed or engaged in connection with the Services who, in the opinion of TfNSW, is guilty of misconduct or is incompetent or negligent. Misconduct under this clause includes discourteous behaviour towards a member of the public or other user of the LRT.

(b) Any person who is the subject of a direction under paragraph (a) must not be re-employed in the Stabling Facility or on the LRT or in any activity connected with the Services without the prior written approval of TfNSW, which approval will not be unreasonably withheld or delayed.
26. FORCE MAJEURE

26.1 Notification

(a) If the Affected Party alleges or wishes to claim that a Force Majeure Event has occurred, it must promptly give the other party notice of the Force Majeure Event as soon as the Affected Party becomes aware of the occurrence of the Force Majeure Event.

(b) As soon as reasonably practicable after giving notice under paragraph (a), if the Affected Party is the Contractor, the Contractor must give TfNSW (progressively if necessary) full particulars of relevant matters pertaining to the Force Majeure Event including:

(i) the nature of the Force Majeure Event;

(ii) the obligations affected;

(iii) the action that the Contractor has taken and/or proposes to take to remedy, overcome or mitigate the situation;

(iv) an estimate of the time during which the Contractor will be unable to carry out the affected obligations due to the Force Majeure Event;

(v) an estimate of the costs that the Contractor will incur to remedy, overcome or mitigate the situation; and

(vi) all insurance moneys to which the Contractor believes it will be entitled if required to make good damage caused by the Force Majeure Event.

(c) After giving notice under paragraph (a) and, if the Affected Party is the Contractor, paragraph (b), the Contractor must continue to keep TfNSW informed of all relevant information pertaining to the Force Majeure Event.

26.2 Meeting

The parties must meet within 10 Business Days of delivery of a notice under clause 26.1(a) to determine:

(a) whether a Force Majeure Event has occurred;

(b) the extent to which the Force Majeure Event is covered by insurance effected under this Contract; and

(c) the estimated duration of the Force Majeure Event.
26.4 Payments

TfNSW is not obliged to pay the Maintenance Fees with respect to those Services which are not performed due to a Force Majeure Event.

26.5 Best endeavours to mitigate effect

During the period of suspension under this clause 26, the Affected Party must use its best endeavours to mitigate the effects of the Force Majeure Event.

26.6 Alternative arrangements

During the period of suspension under this clause 26, TfNSW may make alternative arrangements for the performance of any suspended obligations of the Contractor (without incurring any liability to the Contractor).

26.8 No financial relief to the Contractor

TfNSW will not be obliged to provide any financial relief to the Contractor during the period of suspension under this clause 26, to the extent of the suspension.

26.9 No compensation to TfNSW

The Contractor will not be liable to compensate TfNSW for any Losses which TfNSW incurs in respect of the suspended obligations during the period of suspension under this clause 26.

26.10 Review of the Maintenance Plans

TfNSW acknowledges and agrees that, if the occurrence of a Force Majeure Event directly affects the Maintenance Plans, the Contractor must update the Maintenance Plans in accordance with clause 20.
27. INSURANCE

27.1 Insurance to be effected and maintained by the Contractor

During the Term, the Contractor must effect and maintain the following insurances (Contractor Insurance Policies):

(a) a suitable policy against any liability, loss, claim, demand, suit or proceeding, costs and expenses arising at common law or under any statute or other legislative provision relating to workers compensation as a result of personal injury or death of any person employed by the Contractor; and

(b) a public liability policy of insurance which covers the Contractor and any subcontractors employed from time to time in relation to the carrying out of the Services for their respective rights and interest which covers their liabilities to third parties and includes liability for loss of or damage to property and death of or injury to any person (other than liability which is covered by the insurance referred to in paragraph (a)) for an amount in respect of any one occurrence not less than $50,000,000.

27.2 Contractor Insurance Policies

(a) The Contractor Insurance Policies must:

(i) be effected with an insurer approved by the TfNSW; and

(ii) be for such amounts and containing such conditions, endorsements and exclusions as are acceptable to TfNSW.

(b) The Contractor agrees to pay the cost of any excess or bear the cost of any deductibles (as applicable) in relation to a claim made under the Contractor Insurance Policies.

27.3 Copies of insurance policies to be provided to TfNSW

The Contractor must provide, or cause to be provided to TfNSW, a copy of each insurance policy, renewal certificate and endorsement slip of the Contractor Insurance Policies, as soon as practicable after receipt by the Contractor.
27.4 No vitiation of insurance

The Contractor and the TfNSW must not knowingly permit or suffer to be done any act, matter or thing whereby any insurance required to be effected under this Contract may be vitiated or rendered void or voidable.

27.5 Payment of premiums

The Contractor must pay or cause to be paid punctually all premiums and other moneys payable in respect of the Contractor Insurance Policies.

27.6 Disclosure

The Contractor must give full, true and particular information to the relevant insurer of all matters and things the non-disclosure of which might in any way prejudice or effect any such policy or policies of insurance or the payment of any or all moneys thereunder.

27.7 Notice to TfNSW

The Contractor must promptly notify TfNSW of the proposed cancellation of any insurances required to be effected under this Contract and will not cancel, vary or allow any of the insurance policies to lapse without prior written consent of TfNSW.

27.8 Failure to provide proof of insurance

If, after being requested in writing to do so, TfNSW fails to provide evidence of compliance with its insurance obligations under this Contract to the reasonable satisfaction of TfNSW, without prejudice to other remedies available to TfNSW, TfNSW may effect and keep in force any such insurance and pay such premiums as may be necessary for the purpose and the amounts so paid will be a debt due from the Contractor to TfNSW, which may be deducted or recovered by TfNSW in accordance with this Contract or TfNSW may refuse payment under this Contract until evidence of compliance with the Contractor's insurance obligations is provided to the reasonable satisfaction of TfNSW.

27.9 Liability not relieved

Neither failure to comply, nor full compliance, by the Contractor with the insurance provisions of this Contract, will limit or relieve the Contractor of its liabilities and obligations under any other term of this Contract.

28. CARE OF PROPERTY

28.1 Contractor's responsibility for loss, damage or destruction

The Contractor is responsible for loss of (including theft), damage to or destruction of:

(a) all things within the custody or control of the Contractor;
(b) anything entrusted to the Contractor by TfNSW for the purpose of carrying out any Services; and
(c) anything brought onto the Stabling Facility by any person for the purpose of carrying out the Services,

irrespective of whether that thing is held or located on or about the Stabling Facility or LRT provided that the Contractor is not responsible for loss, damage or destruction that occurs as a result of an act or omission of TfNSW, the Operator or any person for whom TfNSW is responsible which is not an act or omission:
(d) expressly permitted by this Contract; or
(e) within a time frame expressly permitted by this Contract.

28.2 Contractor to prevent damage

(a) The Contractor must, in carrying out the Services:

(i) prevent personal injury or death, or loss or damage to the LRT, the Stabling Facility, the Vehicles and any physical works undertaken by the Contractor as part of the Services; and

(ii) prevent loss or damage to any property (being property other than the LRT, the Stabling Facility or the Vehicles and the physical works undertaken by the Contractor as part of the Services) and the environment.

(b) The Contractor must:

(i) at its cost, repair or make good loss or damage to the LRT, the Stabling Facility, the Vehicles and the environment arising out of:

(A) the carrying out of the Services; or

(B) any other act or omission of the Contractor, the Contractor's Personnel or any person for whom the Contractor is responsible; and

(ii) bear the cost of repairing, or making good, loss or damage to any property (being property other than the LRT, the Stabling Facility or the Vehicles) arising out of:

(A) the carrying out of the Services; or

(B) any other act or omission of the Contractor, the Contractor's Personnel or any person for whom the Contractor is responsible.

29. INDEMNITY

29.1 General indemnity

The Contractor indemnifies and must keep indemnified TfNSW from and against all Claims and Losses whatsoever brought against, suffered or incurred by TfNSW arising out of or in connection with:

(a) any loss of, loss of use of, or damage to TfNSW's property (including to the LRT, the Stabling Facility or the Vehicles) or any other property;

(b) any personal injury, illness or death of any person;

(c) the negligent use or misuse by the Contractor or any other person claiming through or under the Contractor of the gas, electricity, water and other services and facilities in or at the Stabling Facility;

(d) any Pollutant, Contaminant or environmental hazard; or

(e) any breach by the Contractor of the conditions of any approval, consent or permit referred to in 9.1 or any breach of any Environmental Law or any Legislative
Requirements by the Contractor which relates to an aspect of the environment or health and safety,

arising out of or as a consequence of:

(f) the carrying out of, or failure to carry out, the Contractor's obligations under this Contract; or

(g) any act, omission, breach or negligence by the Contractor (or any person for whom it is responsible).

The Contractor's obligation to indemnify TfNSW under this clause 29.1 is reduced proportionately to the extent that TfNSW or any of its agents, employees or contractors (excluding the Contractor or any of its agents employees or contractors) caused or contributed to the Claim or Loss.

29.2 Intellectual property indemnity

The Contractor must indemnify TfNSW against all Claims and Losses arising out of or in connection with an infringement or alleged infringement of any Intellectual Property Right which occurs as a result of the carrying out of the Services or a breach by the Contractor of its obligations or warranties under this Contract provided that liability under this indemnity is reduced proportionately to the extent that TfNSW or its agents, employees or contractors caused or contributed to the Claim or Loss.

29.3 Survival

This clause 29 will survive the expiry or termination of this Contract.
30.3 Civil Liability Act

(a) The operation of Part 4 of the *Civil Liability Act 2002* (NSW) is excluded in relation to any rights, obligations and liabilities arising under or in relation to this Contract regardless of how such rights, obligations or liabilities are sought to be enforced.

(b) The Contractor further agrees that:

(i) in each Subcontract into which it enters for the carrying out of any Services, it will include provisions that, to the extent permitted by law, effectively exclude the operation of Part 4 of the *Civil Liability Act 2002* (NSW) in relation to all rights, obligations or liabilities arising under or in
relation to each Subcontract howsoever such rights, obligations or liabilities are sought to be enforced; and

(ii) it will require and ensure that each Subcontractor will include in any further contract that it enters into with others for the carrying out of any Services, provisions that, to the extent permitted by law, each such further contract will include provisions that effectively exclude the operation of Part 4 of the Civil Liability Act 2002 (NSW) in relation to all rights, obligations or liabilities arising under or in relation to such further contract howsoever such rights, obligations or liabilities are sought to be enforced.

30.4 Survival

This clause 30 will survive the expiry or termination of this Contract.

31. WARRANTIES

31.1 General warranties

The Contractor represents and warrants that:

(a) (status) it is a company limited by shares under the Corporations Act 2001 (Cth);

(b) (power) it has full legal capacity and power:
   (i) to own its property and assets and to carry on its business; and
   (ii) to enter into this Contract and to carry out the transactions that it contemplates;

(c) (corporate authority) it has taken all corporate action that is necessary or desirable to authorise its entry into this Contract and to carry out the transactions that it contemplates;

(d) (authorisations) it holds each authorisation that is necessary or desirable:
   (i) to execute this Contract and to carry out the transactions that it contemplates; and
   (ii) to ensure that this Contract is legal, valid, binding and admissible in evidence,

and it is complying with any conditions to which any of these authorisations is subject;

(e) (document effective) this Contract constitutes its legal, valid and binding obligations, enforceable against it in accordance with its terms (except to the extent limited by equitable principles and laws affecting creditors' rights generally);

(f) (no contravention) neither its execution of this Contract, nor the carrying out by it of the transactions that it contemplates, does or will:
   (i) contravene any law to which it or any of its property is subject or any order of any Authority that is binding on it or any of its property;
   (ii) contravene any authorisation;
   (iii) contravene any undertaking or instrument binding on it or any of its property; or
(iv) contravene its constitution; and

(g) (no trust) it is not entering into this Contract as trustee of any trust or settlement.

31.2 Contractor's warranties (general)

(a) The Contractor warrants that, prior to the date of this Contract, it:

(i) satisfied itself that:

(A) this Contract adequately and appropriately describes the Services in sufficient detail to enable the Contractor to fulfil its obligations under this Contract; and

(B) the Services can be carried out so that the Required Number of Vehicles are Available at all times during the Term;

(ii) informed itself of all industrial matters relevant to the Stabling Facility and the Services;

(iii) was given the opportunity to itself undertake, and to request others to undertake, tests, enquiries and investigations relating to the subject matter of this Contract and otherwise for this purpose was given access to the Variotrams, such parts of the Stabling Facility and LRT as it required; and

(iv) it has inspected the Variotrams, the Stabling Facility, the LRT and the surrounding conditions and accepts the condition of the Variotrams, the Stabling Facility and the LRT.

(b) The Contractor warrants that it did not in any way rely upon:

(i) any information, data, representation, statement or document made, or provided to the Contractor by TfNSW or anyone on behalf of TfNSW or any other information, data, representation, statement or document for which TfNSW is responsible or may be responsible, whether or not obtained from TfNSW or anyone on behalf of TfNSW (excluding notices issued or directions given by TfNSW under this Contract); or

(ii) the accuracy, adequacy, suitability or completeness of any information, data, representation, statement or document contemplated by paragraph 31.2(b)(i), for the purposes of entering into this Contract.

(c) Without limiting paragraph (a), the Contractor warrants that it enters into this Contract based on its own investigations, interpretations, deductions, information and determinations.

(d) The Contractor acknowledges and agrees that:

(i) except as expressly set out in this Contract, TfNSW makes no representation, and gives no warranty, in respect of:

(A) this Contract;

(B) any transaction or arrangement contemplated under this Contract; or

(C) any other matter relevant to the Contractor's decision to enter into this Contract; and
(ii) acknowledges that it is aware that TfNSW has entered into this Contract relying upon the warranties, acknowledgements and agreements in this clause 31 and in the Deed of Disclaimer.

31.3 Non-merger and survival of warranties

(a) The warranties made by the Contractor in this clause 31 are repeated whenever a Variation is made to this Contract.

(b) The warranties contained in this clause 31 survive and do not merge irrespective of any change or amendment to this Contract.

(c) The warranties contained in this clause 31 survive the expiry or termination of this Contract.

32. GOODS AND SERVICES TAX

32.1 Same meaning as GST Legislation

Words and expressions defined in the GST Legislation have the same meaning in this clause 32.

32.2 GST payable

In addition to paying the Maintenance Fee and providing any other consideration under this Contract, which are exclusive of GST, TfNSW must:

(a) pay to the Contractor an amount equal to any GST for which the Contractor is liable on any supply by the Contractor under or in connection with this Contract; and

(b) make payment of that GST as and when TfNSW must pay or provide the consideration for the supply or any part of it in accordance with this Contract.

32.3 Invoice

The Contractor must issue a Tax Invoice (or an adjustment note) to TfNSW for any supply in relation to which the Contractor may recover GST from TfNSW under this Contract, on or before the due date for payment of the consideration for the supply or any part of it.

32.4 Adjustments

The Contractor must refund to TfNSW:

(a) any overpayment by TfNSW for GST; and

(b) any refund of GST received by the Contractor for whatever reason,

in relation to this Contract within 10 Business Days of the Contractor becoming aware of the overpayment or such refund of GST is received by the Contractor, whichever is the earlier.

32.5 GST if TfNSW supplies the Contractor

If TfNSW must pay GST on any supply by TfNSW under this Contract, the Contractor must pay to TfNSW an amount equal to that GST, and indemnify TfNSW against that GST, in exactly the same way as TfNSW must so do for any GST the Contractor must pay, and clauses 32.1 to 32.4 apply to that GST as if TfNSW was the Contractor and the Contractor was TfNSW.
32.6 Indemnities

(a) If a party has a claim under or in connection with this Contract for a cost on which that party must pay GST, the claim is for the cost plus all GST (except any GST for which that party is entitled to an input tax credit).

(b) If a party has a claim under or in connection with this Contract whose amount depends on actual or estimated revenue or which is for a loss of revenue, revenue will be calculated without including any amount received or receivable as reimbursement for GST (whether that amount is separate or included as part of a larger amount).

32.7 Warranty by Contractor that it is registered for GST

If requested by TfNSW, the Contractor must provide satisfactory evidence that it is registered or required to be registered for GST. The Contractor must immediately notify TfNSW if it ceases to be registered for GST.

32.8 Power to withhold if no ABN

TfNSW is entitled to withhold from any payment made to the Contractor such amounts as are required for TfNSW to comply with the provisions of the Taxation Administration Act 1953 (Cth) and related legislation.

33. CONFIDENTIALITY

33.1 Non disclosure

The Contractor must not, and must ensure that its personnel do not, without the prior written consent of TfNSW disclose, or use, copy, supply or reproduce any of, the Confidential Information other than as necessary to perform its obligations under this Contract or as required by law.

33.2 Protective measures

The Contractor must take all necessary measures to keep the Confidential Information confidential.

33.3 No media release

Neither party must issue any information, publication, document or article for publication concerning this Contract or its subject matter in any media without prior written approval of the other.

34. BREACH

34.1 Notice to remedy breach

Without limiting TfNSW's rights under clause 35.1, if the Contractor breaches an obligation under this Contract (including committing a Contractor Event of Default), TfNSW may in writing direct the Contractor to remedy the breach and, acting reasonably, specify the time and date by which the breach must be remedied, if the breach is capable of being remedied.
34.2 TfNSW step-in

If the Contractor fails to comply with a notice served under clause 34.1, TfNSW may remedy (or procure the remedy) of the default or perform (or procure performance of) such action and recover its costs as a debt due form the Contractor.

34.3 No prejudice to other rights

Nothing in this clause 34 prejudices TfNSW's other rights under this Contract or according to law with respect to the Contractor's default.

35. TERMINATION

35.2 Consequences of termination

(a) If TfNSW terminates this Contract under clause 35.1, TfNSW may at its sole discretion employ others to complete the Services and the following will then apply:

(i) the Contractor must leave the Stabling Facility as soon as reasonably practicable and remove materials it has brought onto the Stabling Facility, but must leave any materials required by TfNSW to have the Services completed (or identified in the termination notice as to be retained on the Stabling Facility);

(ii) the Contractor must assign to TfNSW the Contractor's rights and benefits in all its contracts concerning the Services and any warranties and security held by the Contractor under those contracts, with effect from the date of termination of this Contract;

(iii) the Contractor must consent to a novation to TfNSW or its nominees of all Subcontracts and its other contracts concerning the Services (Novated Contracts), as required by TfNSW, and must procure at the time of entering into each Subcontract and such other contracts the consent in writing of all of its Subcontractors and other consultants to the novation.
TfNSW may at any time make payments and may deduct, withhold or set off any amount to be paid under the Novated Contracts from amounts otherwise payable to the Contractor or from any security given on the Contractor's behalf;

(iv) the Contractor must do everything and sign all documents necessary to give effect to this clause 35.2 and it irrevocably appoints TfNSW as its attorney to do this in its name if it fails to do so;

(v) if the cost of appointing others to complete the Services exceeds the amount that would have been paid to the Contractor to complete the Services, then the difference will be a debt due by the Contractor to TfNSW; and

(vi) TfNSW may make a provisional assessment of the amounts payable to TfNSW under paragraph (v) and set off such amount or any part of that amount from amounts otherwise payable to the Contractor.

(b) If this Contract is terminated in accordance with clause 35.1, the Contractor must leave the Stabling Yard as soon as reasonably practicable and remove materials it has brought onto the Stabling Facility, but must leave any materials required by TfNSW to have the Services completed, for which TfNSW must pay to the Contractor the cost of any materials (other than Maintenance Spares) identified in the termination notice as to be retained at the Stabling Facility.

Any dispute in connection with determining the costs referred to in clause 35.2(b), will be subject to dispute resolution provisions in accordance with clause 37.

35.3 Termination TfNSW Event of Default

(a) Upon the occurrence of a TfNSW Event of Default, the Contractor may give notice requiring TfNSW to remedy the default within 40 Business Days (provided in the case of any non-payment the period will be 10 Business Days) after receiving the notice.

(b) If TfNSW fails to remedy the default, or fails to propose steps reasonably acceptable to the Contractor to do so, within 40 Business Days (provided in the case of any non-payment the period will be 20 Business Days) after receiving the notice, then the Contractor may issue a written notice terminating this Contract.

(c) The Contractor has no other right to terminate this Contract, under the common law or otherwise.

35.4 TfNSW's termination for convenience

Notwithstanding any other term of this Contract, TfNSW may, at any time for its convenience and without the need to give reasons, terminate this Contract by giving no less than 20 Business Days written notice to the Contractor.
35.6 Termination for Force Majeure Event

(a) If this Contract is terminated in accordance with clause 26.11, the Contractor must leave the Stabling Yard as soon as reasonably practicable and remove materials it has brought onto the Stabling Facility, but must leave any materials required by TfNSW to have the Services completed, for which TfNSW must pay the cost of any materials (other than Maintenance Spares) identified in the termination notice as to be retained at the Stabling Facility to the Contractor.

Any dispute in connection with determining the costs referred to in this clause 35.6(a), will be subject to dispute resolution provisions in accordance with clause 37.

(b) After termination under clause 26.11, subject to its rights under this Contract, including any right of setoff, TfNSW must pay the Contractor the amounts determined in accordance with clause 35.5(c)(i) to (c)(iii).
36. EXPIRY OF TERM

36.1 Inspection prior to expiry of the Term

(a) On a date agreed between the parties which must be:
   (i) no more than 30 days prior to the Expiry Date; or
   (ii) if this Contract is terminated prior to the Expiry Date, no less than 5 Business Days before the end of the Term,

the Contractor must, jointly with TfNSW and the Operator (and their nominees), inspect the Vehicles and the Signalling Equipment.

(b) The Contractor must:
   (i) within 2 Business Days of an inspection under this clause 36.1, provide TfNSW with a report (Return Condition Report):
      (A) detailing any repairs and maintenance necessary to ensure the Vehicles and the Signalling Equipment comply with the condition contemplated by clause 36.2; and
      (B) identifying any maintenance documentation that is incomplete or out of date; and
   (ii) if requested by TfNSW:
      (A) carry out all repairs and maintenance necessary to ensure the Vehicles and the Signalling Equipment comply with the condition contemplated by clause 36.2; and
      (B) update and provide to TfNSW any maintenance documentation that was identified as incomplete or out of date in the Return Condition Report.

(c) TfNSW must procure all necessary access rights for the Contractor to carry out any inspection or repair of the Vehicles and the Signalling Equipment contemplated by paragraphs (a) and (b).

36.2 Return Condition

(a) In conducting any inspection under clause 36.1, the Contractor must verify that (as at the date of the inspection):
   (i) each Vehicle is Available;
   (ii) for each Vehicle and all Signalling Equipment:
      (A) all Scheduled Maintenance is complete and up to date; and
      (B) there is no outstanding Unscheduled Maintenance; and
(iii) all maintenance documentation, including manuals and Vehicle histories, is complete and up to date.

(b) TfNSW and the Operator (and their nominees) may reinspect the Vehicles and the Signalling Equipment:

(i) on the Expiry Date; or

(ii) if this Contract is terminated prior to the Expiry Date, on the date that is the end of the Term,

to assess the Contractor's compliance with clauses 36.1.

36.3 Cost of inspection and repair

(a) Subject to paragraph (b), the Contractor must carrying out any inspection, repairs or other works required under this clause 36 at its cost.

(b) To the extent the Contractor can demonstrate to the reasonable satisfaction of TfNSW that any repairs are:

(i) required as a result of a Relief Event; or

(ii) Additional Services that must be carried out to that Vehicle to ensure that Vehicle is in the condition contemplated by clause 36.2,

the Contractor will be entitled to be paid for such repairs in accordance with clause 16.3.

36.4 Contractor's obligations

Without limiting the other provisions of this Contract, on or before the end of the Term, the Contractor acknowledges and agrees that it must:

(a) ensure that the CAMS and the Asset Register is returned to the TfNSW, such that:

(i) it is 100% functional;

(ii) all data entry is 100% up to date (as at the end of the Term);

(iii) all data archives are included;

(iv) all supporting documentation is complete;

(v) all software is up to date;

(vi) all software licenses are current; and

(vii) all access rights to the Contractor have been cancelled;

(b) deliver to TfNSW (in electronic (MS Word) and hard copy formats):

(i) the then current version of each of the Project Plans; and

(ii) all Maintenance History Information, including a copy of the information held on the CAMS and the Asset Register (as at the end of the Term);

(c) deliver to TfNSW at the Stabling Facility (or other location specified by TfNSW) those Maintenance Spares required to be delivered by the Contractor to TfNSW pursuant to clause 36.5;
(d) return to TfNSW anything entrusted to the Contractor by TfNSW for the purpose of carrying out the Services, including any TfNSW Spares in the possession of the Contractor and the Specialist Maintenance Tools;

(e) ensure that, as at the end of the Term, everything provided by the Contractor to TfNSW in accordance with paragraphs (c) and (d) is in good working condition, there is no immediate repair work required to any such item, part or thing and they are free from any Encumbrance; and

36.5 Maintenance Spares

(a) Where:

(i) this Contract terminates on the Expiry Date, the Contractor must deliver all of the Maintenance Spares to TfNSW; or

(ii) this Contract is terminated prior to the Expiry Date, TfNSW may determine in its absolute discretion which of the Maintenance Spares the Contractor is to deliver to TfNSW.

(b) TfNSW will pay the Contractor the fair market value for those Maintenance Spares (other than the Initial Maintenance Spares) delivered by the Contractor to TfNSW in accordance with this clause 36.5. The Initial Maintenance Spares will be provided by the Contractor to TfNSW free of charge.

37. DISPUTE RESOLUTION

37.1 Notice of dispute

(a) If a dispute or difference between the Contractor and TfNSW arises in connection with the Contract or the subject matter of the Contract, then either party may deliver to the other party a notice of dispute (Dispute Notice).

(b) Any Dispute Notice given under clause 37.1(a) must:

(i) be in writing;

(ii) state that it is a notice under clause 37.1(a); and

(iii) include or be accompanied by reasonable particulars of the dispute.

(c) Unless otherwise expressly provided in the Contract, it is a condition precedent to the referral of a dispute to litigation that the parties to the dispute first follow and complete the procedures referred to in this clause 37.

37.2 Executive negotiation

(a) Within 10 Business Days of the date of a Dispute Notice (or such longer period agreed in writing by the parties), the designated officers must meet and in good faith attempt to resolve the dispute.

(b) If a dispute is not resolved within 25 Business Days of the date of the Dispute Notice, either party may give written notice to the other party and the Dispute Resolution Board requiring that the those parts of the dispute which remain unresolved be referred to the Dispute Resolution Board in accordance with clause 37.3.

(c) For the purposes of this clause 37.2 the designated officers are:
(i) in respect of TfNSW, Director Vehicles, Vessels and Rolling Stock (or nominated alternative if not available); and

(ii) in respect of the Contractor, Iñaki Mendizabal (or nominated alternative if not available).

37.3 Obtaining Dispute Resolution Board's decision

(a) The Dispute Resolution Board has been constituted under the DRB Agreement. In performing its functions, the Dispute Resolution Board must comply with this Contract and the DRB Agreement.

(b) If a dispute is referred to the Dispute Resolution Board under clause 37.2(b) the Dispute Resolution Board will be deemed to have received such reference on the date when it is received by the chairperson of the Dispute Resolution Board.

(c) Both parties must promptly make available to the Dispute Resolution Board all such additional information, access to the Site, and appropriate facilities, as the Dispute Resolution Board may require for the purposes of making a decision on the Dispute.

(d) The Dispute Resolution Board is not an arbitral tribunal.

(e) Notwithstanding anything else, to the extent permitted by law, the Dispute Resolution Board will have no power to apply or have regard to the provisions of Part 4 of the Civil Liability Act 2002 NSW.

(f) Within 56 days after receiving a reference under clause 37.2(b), or within such other period as may be proposed by the Dispute Resolution Board and approved by both parties, the Dispute Resolution Board must give its decision in writing, which will be reasoned and must state that it is given under this clause 37.3(f). The decision will be immediately binding on both parties, who must give effect to it unless and until it is revised in an amicable settlement or an arbitral award as described below.

(g) If either party is dissatisfied with the Dispute Resolution Board's decision, then either party may, within 28 days after receiving the decision, give notice to the other party of its dissatisfaction (Notice of Dissatisfaction).

If the Dispute Resolution Board fails to give its decision within the period of 56 days (or as otherwise approved) after receiving a reference under clause 37.2(b), then either party may, within 28 days after this period has expired, give a Notice of Dissatisfaction to the other party.

A Notice of Dissatisfaction issued under this clause must:

(i) state that it is given under this clause 37.3(g), and

(ii) set out the matter in dispute and the reason(s) for dissatisfaction.

Except as stated in clause 37.5, neither party will be entitled to commence arbitration of a dispute unless a Notice of Dissatisfaction has been given in accordance with this clause 37.3(g).

(h) If the Dispute Resolution Board has given its decision as to a dispute, and no Notice of Dissatisfaction has been given by either party within 28 days after it received the Dispute Resolution Board's decision, then the decision will become final and binding upon both parties.
(i) Once a decision of the Dispute Resolution Board has become final and binding under paragraph (h), neither party will be entitled to challenge the decision on the basis that a member of the Dispute Resolution Board did not, at the time of making the decision, meet the criteria referred to in Part 2 of Annexure Part J.

37.4 Amicable settlement

Where a Notice of Dissatisfaction has been given under clause 37.3(g), both parties must attempt to settle the dispute amicably before the commencement of arbitration. However, unless both parties agree otherwise, if no amicable settlement has been reached by the 56th day after the day on which the Notice of Dissatisfaction was served, the dispute will be taken to have been referred to arbitration under clause 37.10.

37.5 Failure to comply with the Dispute Resolution Board's decision

If a party fails, within 7 days or as the parties otherwise agree in writing, to comply with the decision of the Dispute Resolution Board, then the other party may, without prejudice to any other rights it may have, refer this failure itself to arbitration under clause 37.10. In these circumstances clauses 37.1 to 37.3 will not apply to this reference.

37.6 Expiry of Dispute Resolution Board's appointment

If a dispute arises and there is no Dispute Resolution Board in place, whether by reason of the expiry of the Dispute Resolution Board's appointment or otherwise:

(a) clause 37.2 will still apply, but if the dispute is not resolved within 28 days after a notice is given under clause 37.1, the dispute will not be referred to the Dispute Resolution Board;

(b) clauses 37.3, 37.4 and 37.5 will not apply; and

(c) the dispute may be referred directly to arbitration under clause 37.10.

37.7 Replacement of Dispute Resolution Board member

(a) If a member of the Dispute Resolution Board declines to act or is unable to act as a result of death, disability, resignation or termination of appointment:

(i) if that member is the chairperson, the remaining two members will appoint a replacement member; and

(ii) if that member is not the chairperson:

(A) if the parties have previously agreed upon one or more reserve members for the Dispute Resolution Board, and one or more such members are willing and able to act on the Dispute Resolution Board, the party that nominated the member to be replaced will appoint one of the reserve members to the Dispute Resolution Board; or

(B) if no reserve members have been agreed between the parties or none of the reserve members are willing and able to act on the Dispute Resolution Board, the party that nominated the member to be replaced must nominate a replacement member satisfactory to the other party.

(b) If, within 42 days of a member declining to act or being unable to act on the Dispute Resolution Board, the member has not been replaced by a person appointed in accordance with clause 37.7(a), either party may request the
President for the time being of the Institute of Arbitrators and Mediators Australia to appoint a replacement member. This appointment will be final and conclusive.

(c) Any appointment or nomination made under clause 37.7(a) or 37.7(b) must be made in accordance with the criteria set out in Part 2 of Annexure Part J.

(d) The parties, the remaining members and the new member must enter into a replacement dispute resolution board agreement on substantially the same terms as the DRB Agreement.

37.8 Termination of Dispute Resolution Board

The appointment of any member of the Dispute Resolution Board may be terminated by mutual agreement of both parties, but not by TfNSW or the Contractor acting alone. Unless otherwise agreed by both parties, the DRB Agreement will terminate upon the later of:

(a) the Dispute Resolution Board having made a decision in accordance with clause 37.3 in respect of all disputes that were referred to it; or

(b) the expiration of the last Defects Liability Period.

37.9 Dispute Resolution Board's Advisory Function

(a) In addition to its functions determining disputes, the Dispute Resolution Board will have a general advisory function.

(b) Each party must provide all reasonable assistance to the Dispute Resolution Board in fulfilling its advisory function including providing all information it reasonably requests.

(c) Either party may refer any unresolved matters that are not yet a dispute to the Dispute Resolution Board for its opinion. Any such referrals must be made in writing to the chairperson of the Dispute Resolution Board and a copy simultaneously provided to the other party.

(d) For the purposes of enabling it to fulfil this function the Dispute Resolution Board will:

(i) keep itself informed as to the maintenance of the Vehicles and the Signalling Equipment and in particular any issues affecting the successful maintenance of the Vehicles and the Signalling Equipment;

(ii) attend any Contract Control Group meetings which it is requested to attend by either party; and

(iii) provide, in writing, a recommendation for the resolution of any matter referred to it under clause 37.9(c) within two weeks of the referral, or within a longer time if agreed between the Dispute Resolution Board, TfNSW and the Contractor.

37.10 Arbitration

Any dispute which is referred to arbitration will be conducted before a person to be:

(a) agreed between the parties; or

(b) failing agreement within 21 days after the dispute has been referred to arbitration, appointed by the President for the time being of the Institute of Arbitrators and Mediators Australia.
37.11 Arbitration rules

To the extent that they are not inconsistent with the Contract, the Rules for the Conduct of Commercial Arbitration of The Institute of Arbitrators and Mediators Australia will apply to the arbitration.

The seat of the arbitration will be in Sydney, Australia.

The arbitrator will have power to grant all legal, equitable and statutory remedies and to open up, review and substitute any determination of the Dispute Resolution Board under clause 37.3 that is not final and binding on the parties pursuant to clause 37.3.

Notwithstanding anything else, to the extent permissible by Law, the arbitrator will have no power to apply or to have regard to the provisions of Part 4 of the Civil Liability Act 2002 (NSW).

All aspects of the arbitration, including:

(a) any proceedings or hearings;
(b) any meetings;
(c) any submissions;
(d) any materials in the proceedings created for the purpose of the arbitration; and
(e) documents produced in the proceedings which are not otherwise in the public domain,

must be kept private and confidential except:

(f) where the parties expressly agree in writing to the contrary;
(g) as required by law; or
(h) as required in order to enforce an arbitration award.

37.12 Summary relief

Subject to clause 5.6A, nothing will prejudice the right of a party to institute proceedings to enforce payment due under the Contract or to seek injunctive or urgent declaratory relief in respect of a dispute under clause 37 or any matter arising under the Contract.

37.13 Continue to perform

Notwithstanding the existence of a dispute, both parties must continue to perform their respective obligations under the Contract.

38. OPERATOR AS AGENT OF TFNSW

(a) The Contractor acknowledges and agrees that:

(i) the Operator will be operating the Vehicles on the LRT;

(ii) TfNSW intends to appoint the Operator as its agent for purposes of managing certain of TfNSW's rights and obligations under this Contract; and
(iii) prior to the Commencement Date, TfNSW will provide written notice to the Contractor specifying the role and functions of the Operator as the agent of TfNSW (Authority Policy).

(b) At any time during the Term, by written notice to the Contractor, TfNSW may update, amend or terminate the Authority Policy.

(c) Unless expressly authorised in the Authority Policy and then only to the extent so authorised in the Authority Policy, the Operator is not authorised (as agent for TfNSW) to:

(i) agree any Variation to this Contract; or

(ii) settle any dispute the subject of a Dispute Notice.

39. NOTICES

39.1 How to give a notice

A notice, consent or other communication under this Contract is only effective if it is:

(a) in writing, signed by or on behalf of the person giving it;

(b) addressed to the person to whom it is to be given; and

(c) either:

(i) delivered or sent by pre-paid mail (by airmail, if the addressee is overseas) to that person's address; or

(ii) sent by fax to that person's fax number and the machine from which it is sent produces a report that states that it was sent in full.

39.2 When a notice is given

A notice, consent or other communication that complies with this clause is regarded as given and received:

(a) if it is delivered or sent by fax:

(i) by 5.00 pm (local time in the place of receipt) on a Business Day – on that day;

(ii) after 5.00 pm (local time in the place of receipt) on a Business Day, or on a day that is not a Business Day – on the next Business Day; or

(b) if it is sent by mail:

(i) within Australia – 3 Business Days after posting; or

(ii) to or from a place outside Australia – 7 Business Days after posting.

39.3 Address for notices

A person's mail address and fax number are those set out below, or as the person notifies the sender:
Contractor
Address: Suite 2 Level 3 / 4 Kyabra Street, Newstead QLD 4006
Fax Number: 07 3666 0076
Attention: Julio Rey

TfNSW
Address: Level 6, 18 Lee Street, Chippendale 2008
Fax Number: +61 2 8202 2209
Attention: Project Director

PLRC
Address: Level 6, 18 Lee Street, Chippendale 2008
Fax Number: +61 2 8202 2209
Attention: Chief Executive Officer

40. AMENDMENT AND ASSIGNMENT

40.1 Amendment
This Contract may only be amended or replaced by another document signed by or on behalf of each party.

40.2 Assignment
The Contractor must not assign, transfer or otherwise deal with any of its rights or obligations under this Contract except with the prior written consent of TfNSW.

41. WAIVER OF RIGHTS

(a) A right may only be waived in writing, signed by the party giving the waiver.

(b) No other conduct of a party (including a failure to exercise, or delay in exercising, the right) operates as a waiver of the right or otherwise prevents the exercise of the right.

(c) A waiver of a right on one or more occasions does not operate as a waiver of that right or as an estoppel precluding enforcement of that right if it arises again.

(d) The exercise of a right does not prevent any further exercise of that right or of any other right.

42. GENERAL

42.1 Governing law and jurisdiction

(a) This Contract is governed by and must be construed according to the law applying in New South Wales.

(b) The parties submit to the non-exclusive jurisdiction of the courts of New South Wales, and any court that may hear appeals from any of those courts, for any proceedings in connection with this Contract, and waives any right it might have to claim that those courts are an inconvenient forum.
42.2 Giving effect to documents
Each party must do anything (including execute any document), and must ensure that its employees and agents do anything (including execute any document), that any other party may reasonably require to give full effect to this Contract.

42.3 No bias against drafter
No provision of this Contract is to be interpreted to the disadvantage of a party because that party (or its representative) drafted that provision.

42.4 Excluding liability
Any provision of this Contract which seeks to limit or exclude a liability of a party is to be construed as doing so only to the extent permitted by law.

42.5 Cost of performing obligations
Each party must perform its obligations under this Contract at its own cost, unless expressly provided otherwise.

42.6 Expenses, duty, taxes and other imports
(a) Each party must pay its own expenses incurred in negotiating and executing this Contract.
(b) The Contractor must pay any duty, taxes or other imposts payable in respect of this Contract or payable in connection with the performance of the Services.

42.7 Further acts and documents
Each party must promptly do all further acts and execute and deliver all further documents (in form and content reasonably satisfactory to that party) required by law or reasonably requested by another party to give effect to this Contract.

42.8 No representation or reliance
(a) Each part acknowledges that no party (nor any person acting on a party's behalf) has made any representation or other inducement to it to enter into this Contract, except for representations or inducements expressly set out in this Contract.
(b) Each party acknowledges and confirms that it does not enter into this Contract in reliance on any representation or other inducement by or on behalf of any other party, except for representations or inducements expressly set out in this Contract.

42.9 Indemnities
(a) Each indemnity in this Contract is a continuing obligation, separate and independent from the other obligations of the parties, and survives termination, completion or expiration of this Contract.
(b) It is not necessary for a party to incur expense or to make any payment before commencing proceedings to enforce a right of indemnity conferred by the Contract.
(c) A party must pay on demand any amount it must pay under an indemnity in the Contract.

42.10 Survival of terms
Without limiting clause 42.9(a):
(a) clauses 5, 18.4, 18.5, 18.7, 19, 22.2, 22.4, 24, 29, 30, 31, 32, 36.5, 37, 38, 39 (and any other clauses necessary for or incidental to the operation of these clauses) and this clause 42 (together, the Surviving clauses) will survive the rescission, expiry or termination of this Contract; and

(b) if this Contract is rescinded or terminated, no party will be liable to any other party except:

(i) under the Surviving clauses; or

(ii) in respect of any breach of this Contract occurring before such rescission or termination.

42.11 Exercise of remedies

(a) If the Contractor breaches any of its obligations under this Contract, TfNSW may exercise any or all of the rights and powers and pursue any or all of the remedies available to TfNSW under this Contract and/or enforce any other legal or equitable remedy available under applicable law.

(b) Each and every right, power and remedy of TfNSW will be cumulative and in addition to any other right, power and remedy, whether under this Contract or applicable law, which may be exercised by TfNSW and the exercise of a right, power or remedy will not be construed to be a waiver of the right to exercise any other right, power or remedy.

(c) No delay or omission by TfNSW in the exercise of any right, power or remedy shall impair such right, power or remedy or constitute a waiver of the relevant breach.

42.12 Relationship between TfNSW and the Contractor

Nothing in or contemplated by this Contract will be construed or interpreted as:

(a) constituting a relationship between TfNSW and the Contractor of partners, joint venturers, fiduciaries, employer and employee or principal and agent; or

(b) imposing any general duty of good faith on TfNSW to the Contractor in relation to or arising out of this Contract, other than to comply with the obligations (if any) expressly stated to be assumed by TfNSW under this Contract on a good faith basis.

42.13 Severance

If at any time any provision of this Contract is or becomes illegal, invalid or unenforceable in any respect under applicable law, that provision is to be severed to the extent necessary to make this Contract enforceable, and it will not affect or impair the legality, validity or enforceability of any other provision of this Contract.

42.14 Operation of this Contract

(a) To the extent permitted by Law, in relation to its subject matter, this Contract:

(i) embodies the entire understanding of the parties, and constitutes the entire terms agreed by the parties; and

(ii) supersedes any prior written or other agreement of the parties.

(b) This Contract applies to the Services undertaken by the Contractor after the Contract Effective Date, whether the Services are undertaken before, on or after the Commencement Date.
42.15 Consents

A consent required under this Contract from a party may be given or withheld or may be given subject to any conditions, as that party (in its absolute discretion) thinks fit, unless this Contract expressly provides otherwise.

42.16 Counterparts

This Contract may be executed in any number of counterparts and by the parties on separate counterparts.

42.17 Attorneys

Each person who executes this Contract on behalf of a party under a power of attorney declares that he or she is not aware of any fact or circumstance that might affect his or her authority to do so under that power of attorney.

42.18 Contract documents to be in English

All documentation in computer readable or other written forms brought (whether before or after the date of the Contract) or required to be brought into existence as part of, or for the purpose of, carrying out the work under the Contract must be written in the English language.
EXECUTED as an agreement.

EXECUTED for and on the behalf of CAF Rail Australia Pty Ltd ABN 15 146 694 537 by its attorney in the presence of:

Witness

[Signature]

Name of Witness: [Name]

Attorney

[Signature]

Name of Attorney: [Name]

Signed, Sealed and delivered by the Director General of the Department of Transport for and on behalf of Transport for NSW but without incurring any personal liability in respect thereof in the presence of:

Signature of Witness

[Signature]

Name of Witness: [Name]

Signature

[Signature]

Name: [Name]

EXECUTED by Pyrmont Light Rail Company Limited ABN 45 065 183 193 in accordance with s127 of the Corporations Act 2001 (Cth):

Signature of director

[Signature]

Name: [Name]

Signature of director/secretary

[Signature]

Name: [Name]
Maintenance Contract

Annexures A - O

The Director General of the Department of Transport for and on behalf of Transport for NSW (TfNSW)

Pyrmont Light Rail Company Pty Limited
ACN 065 183 913 (PLRC)

CAF Rail Australia Pty Ltd
CIF A20001020 (Contractor)
Annexure A

PROJECT PLANS

Part A – Minimum requirements for Project Plans

1. Variotram Technical Maintenance Plan

   (a) The Variotram Technical Maintenance Plan must, as a minimum, include the following:

   (i) a fully detailed programme of Scheduled Maintenance to the Variotrams for the next Contract Year, including the scope, frequency, time intervals, content and method of execution of:

      (A) scheduled maintenance activities;
      (B) inspections;
      (C) agreed overhauls; and
      (D) renewals,

      which, in relation to the Variotrams, must be at least equivalent to the Variotram Scheduled Maintenance Regime;

   (ii) a rolling programme of Scheduled Maintenance to the Vehicles for the next five years, which includes for each year:

      (A) an outline of scheduled maintenance activities to the Variotrams for that year, including a maintenance star chart detailing specific inspection or scheduled maintenance to be undertaken at recommended or mandated intervals during that year; and
      (B) proposed overhauls and renewals;

   (iii) details of any deviations from the then current Variotram Technical Maintenance Plan;

   (iv) details of any scheduled maintenance activities for the previous Contract Year set out in the then current Variotram Technical Maintenance Plan that remain outstanding together with reasons as to why those scheduled maintenance activities have not been undertaken;

   (v) details of any Authorisations required, or any requirement to give notice to any Government Agency or other third party, prior to commencement of any scheduled maintenance activity;

   (vi) details of any proposed projects planned to be implemented to introduce new systems, components or parts to the Variotram, for example as a result of technology upgrades or replacement of obsolete equipment; and

   (vii) a review of the level of spares held by the Contractor for the Variotrams to ensure they are appropriate and adequate for the Contractor to carry out the Services, including details of the current stock levels of the Initial Maintenance Spares.
Without limiting paragraph (a), the Variotram Technical Maintenance Plan must include all scheduled maintenance activities to the Vehicles as necessary to ensure the Contractor complies with its obligations under this Contract.

2. Technical Maintenance Plan

(a) The Technical Maintenance Plan must, as a minimum, include the following:

(i) a fully detailed programme of Scheduled Maintenance to the LRVs for the next Contract Year, including the scope, frequency, time intervals, content and method of execution of:

(A) scheduled maintenance activities;
(B) inspections;
(C) overhauls; and
(D) renewals;

(ii) a rolling programme of Scheduled Maintenance to the Vehicles for the next five years, which includes for each year an outline of scheduled maintenance activities to the LRVs (including overhauls and renewals) for that year, including a maintenance star chart detailing specific inspection or scheduled maintenance to be undertaken at recommended or mandated intervals during that year;

(iii) details of any deviations from the then current Technical Maintenance Plan;

(iv) details of any scheduled maintenance activities for the previous Contract Year set out in the then current Technical Maintenance Plan that remain outstanding together with reasons as to why those scheduled maintenance activities have not been undertaken;

(v) details of any Authorisations required, or any requirement to give notice to any Government Agency or other third party, prior to commencement of any scheduled maintenance activity;

(vi) details of any proposed projects planned to be implemented to introduce new LRV systems, components or parts required, for example as a result of technology upgrades or replacement of obsolete equipment; and

(vii) a review of the level of spares held by the Contractor to ensure they are appropriate and adequate for the Contractor to carry out the Services, including details of the current stock levels of the Maintenance Spares for the LRVs.

(b) Without limiting paragraph (a), the Technical Maintenance Plan must include all scheduled maintenance activities to the Vehicles as necessary to ensure the Contractor complies with its obligations under this Contract.

3. Transition Plan

Plan for transition of maintenance activities to the Contractor under this Contract providing details on all tasks to be completed during the Mobilisation Period in order for the Contractor to commence the Services on the Commencement Date in accordance with this Contract.
The Transition Plan must provide details of transition activities and demonstrate a proactive approach to ensure an effective transition of the Services to the Contractor, including the Contractor's approach to:

(a) staff recruitment, mobilisation and training;
(b) ensuring compliance with the Operators rail safety accreditation;
(c) safety (including rail safety) and WHS systems and procedures;
(d) security, environment and sustainability compliance;
(e) hazardous materials and dangerous goods risk registers;
(f) integration with TfNSW's systems and procedures including fault reporting processes;
(g) maintenance procedures and documentation;
(h) planning and reporting procedures;
(i) establishing necessary Subcontractor services;
(j) spares audits and establishing inventory management; and
(k) approach to implementation of the CAMS.

4. **Through Life Support Plan**

Plan to include a description of support for the Vehicles incorporating:

(a) asset management philosophy;
(b) availability requirements process;
(c) defect reporting;
(d) maintenance approach;
(e) graffiti and vandalism management process;
(f) Scheduled Maintenance management process;
(g) Unscheduled Maintenance management process;
(h) fleet condition audit management process;
(i) operations support procedures; and
(j) an Availability reporting process.

5. **Operational Interface Plan**

The Contractor must ensure the Operational Interface Plan sets out how the Contractor will manage the interface with the Operator and TfNSW and must include as a minimum:

(a) details of the roles and responsibilities of the Contractor's Personnel responsible for operational interface and the implementation of the Operational Interface Plan;
(b) details of key operational interface activities;
(c) details of communication procedures to ensure operational objectives are met through the availability of Vehicles including:

(i) entering Vehicles into service;
(ii) removing Vehicles from service;
(iii) changeover of Vehicles on the LRT; and
(iv) recovery of Vehicle from the network;

(d) details of procedures to ensure the Operational Control Centre is informed of and kept up to date with the status and Availability of the Vehicles; and

(e) details of procedures or systems to ensure Contractor's operational staff can clearly identify Vehicles that are Unavailable.

6. Incident Reporting and Response Plan

The Contractor must ensure the Incident Reporting and Response Plan sets out how the Contractor will enable TfNSW and the Operator to comply with its obligations under the Rail Safety Act (including any applicable requirements of the Operator's Safety Management System) and must include as a minimum:

(a) details of the roles and responsibilities of the Contractor's Personnel responsible for incident reporting and the implementation of the Incident Reporting and Response Plan;

(b) systems and procedures for the reporting of incidents and near misses both internally and to the Operator involving the Contractor's Personnel, employees of TfNSW or the Operator and their sub-contractors or service providers;

(c) systems and procedures for the management of incidents including the procedures for the recovery of any Vehicle that has suffered a Failure on the LRT;

(d) systems and procedures for the recording of incidents and near misses;

(e) processes to ensure incidents or near misses are investigated and appropriate controls are put in place to reduce the likelihood of a reoccurrence; and

(f) processes to ensure investigations are suitably closed out in a timely manner.

7. Maintenance Services WHS Plan

The Contractor must ensure the Maintenance Services WHS Plan sets out how the Contractor will comply with the requirements of the Operator's WHS policy and all applicable Legislative Requirements and must include as a minimum:

(a) an work health and safety (WHS) policy;

(b) details of the roles and responsibilities of the Contractor's Personnel responsible for WHS and rail safety management and the implementation of the Contractor's WHS policy.

(c) procedure for the reporting of risks to safety by employees;

(d) process of safety risk management and mitigation;

(e) emergency planning;
(f) hazard identification, evaluation and control;
(g) details of WHS training of personnel;
(h) safe work method statements;
(i) subcontractor management controls;
(j) accident reporting, recording, investigation and analysis; and
(k) safety audits.

8. **Environmental Management Plan**

The Contractor must ensure the Environmental Management Plan includes details of the following:

(a) measures to ensure environmental objectives and performance requirements are met, which include, as a minimum:
   (i) compliance with all Environmental Law relevant to the Services;
   (ii) the implementation of mitigation strategies to prevent events of material or serious harm to the Environment; and
   (iii) compliance with all environmental approvals relating to the Services or the carrying out of the Services;

(b) details of the roles and responsibilities of the Contractor's Personnel responsible for the environmental management and the implementation of the Environmental Management Plan;

(c) chemicals, fuels and hazardous materials management, which include, as a minimum:
   (i) the containment measures and clean up procedures for spillage of fuels and other hazardous materials; and
   (ii) details of any hazardous materials register, including storage requirements, proper usage, handling information and disposal procedures; and

(d) waste management, which include, as a minimum:
   (i) the measures to minimise and mitigate impacts from Waste generated from carrying out the Services; and
   (ii) recycling management strategies.
9. **Asset Management Plan**

The contractor must prepare a Variotram Asset Management Plan that details the Heavy Maintenance including recommended overhaul and refurbishment activities for fleet over a 10 year period. The Asset Management must be consistent with the schedule of maintenance activities detailed in the Technical Maintenance Plan.

The initial Asset Management Plan must be prepared and submitted to TfNSW for review within one month of Contract Award. The Asset Management Plan is required to include:

1. **Condition assessment of each Variotram and capital spares items and status of all components and systems against schedule maintenance requirements including Heavy Maintenance requirements and failure based events;**

2. **Forecast frequency and timing for all Heavy Maintenance per Variotram including the initial baseline Heavy Maintenance requirement provided by TfNSW and as agreed with the Contractor and any Heavy Maintenance Recommendations (scheduled overhauls) over a 10 year period. The frequency and timing of Heavy Maintenance must be planned to ensure fleet availability requirements are not impacted. The baseline Heavy Maintenance sets the minimum level of Heavy Maintenance for the purpose of Variotram Fleet availability;**

3. **Forecast frequency of Heavy Maintenance failure based events by component in accordance with the Heavy Maintenance in Table 1 Annexure B an annual basis;**

4. **Forecast annual costs for the baseline and TfNSW accepted recommended Heavy Maintenance (scheduled overhauls) in accordance with Annexure B 2.6, including all material, subcontracts and labour, only where Contractor can demonstrate that the existing maintenance staffing is insufficient to perform the Heavy maintenance;**

5. **Forecast annual costs for the Heavy Maintenance (failure based) in accordance with Annexure B 2.6, including all material, subcontracts and labour, only where Contractor can demonstrate that the existing maintenance staffing is insufficient to perform the Heavy maintenance;**

6. **Activity and workforce plan to utilise the existing workforce to the maximum extent to perform the Heavy Maintenance.**

7. **Identification of any Variotram refurbishment recommendations including reason, scope, timing, cost and availability impacts/benefits.**

8. **Fleet improvement initiatives where identified including cost benefit analysis, availability and reliability improvements for each initiative.**

The Asset Management Plan must be updated:

i) **annually, in September or**

ii) **in the event of a major change within 20 business days**

and submitted to TfNSW.
The asset management plan will be subject to review and agreement by TfNSW. The Contractor cannot change the Asset Management Plan without the review process of TfNSW in accordance with Clause 20.2 of the Contract.

10. Annual Works Plan

The contractor must prepare a Variotram Annual Works Plan that details the Heavy Maintenance Plan for the Variotram Fleet for the next year. The Asset Management must be consistent with the schedule of maintenance activities detailed in the Technical Maintenance Plan and Asset Management Plan. The Annual Works Plan must include:

1. Heavy Maintenance schedule including timing and duration for all planned Heavy Maintenance activities (overhauls and renewals) per vehicle scheduled to occur during the year.

2. Forecast of Heavy Maintenance (Failure events) for the year by component;

3. Annual works budget for all Heavy Maintenance including all materials, subcontracts and labour only where existing workforce can be demonstrated unable to perform the work and administration.


5. Maintenance activity programme for all scheduled and forecast unscheduled maintenance during the year. Program is to include resource utilisation and planning to minimise need for supplementary labour to perform Heavy Maintenance Activities.

6. The Annual Works Plan must be updated annually or in the event of a major change and submitted to TfNSW by end of March for the next financial year.

7. The Annual Works Plan will be subject to review and agreement by TfNSW. The Contractor cannot change the Annual Work Plan without the review process of TfNSW in accordance with Clause 20.2 of the Contract.
# Part B - Requirements for submission of Project Plans

<table>
<thead>
<tr>
<th>Document Title</th>
<th>Documentation content</th>
<th>Status at date of this Contract</th>
<th>First Issue</th>
<th>Min Review Frequency</th>
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<tr>
<td>Variotram Technical Maintenance Plan</td>
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<td>Draft</td>
<td>First issue 1 month after Contract Effective Date</td>
<td>Annually no less than 30 Business Days prior to the end of each Contract Year</td>
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<td>Technical Maintenance Plan</td>
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<td>Annually no less than 30 Business Days prior to the end of each Contract Year</td>
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<td>Transition Plan</td>
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<td>Issue at Contract Effective Date</td>
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1 Issue date stated in Part B is latest issue date acceptable
## Part B - Requirements for submission of Project Plans

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<th>Min Review</th>
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<td>Asset Management Plan</td>
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<td>First issue 1 month after Contract Effective Date</td>
<td>Updated annually or in the event of a major change.</td>
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Annexure B

SCOPE OF MAINTENANCE SERVICES

1. Mobilisation Period

The Contractor must, in accordance with clause 20, submit the applicable Project Plan to TfNSW at the time stated in the table in Part B of Annexure A.

2. Vehicles

2.1 Scope of services - Vehicles

The Contractor will provide repair and maintenance services for the Vehicles. The general scope can be summarised as all Scheduled Maintenance and Unscheduled Maintenance of the Vehicles. The scope does not include maintenance activities that are expressly excluded from the Contractor’s obligations under this Contract.

2.2 Scheduled Maintenance - Vehicles

(a) Scheduled Maintenance on the Vehicles includes:

(i) the scheduled maintenance activities set out in the Variotram Scheduled Maintenance Regime In Table 1 below. The Contractor must carry out the scheduled maintenance activities at the frequency shown in Table 1. The Variotram Scheduled Maintenance Regime represents the minimum requirements for scheduled maintenance on the Variotrams.
## Table 1 – Variotram Scheduled Maintenance Regime

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<th>Activity Number</th>
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<th>Interval</th>
<th>Tolerance</th>
<th>Unit</th>
<th>Activity Title</th>
<th>Scheduled maintenance activities</th>
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<td>15000</td>
<td>1500</td>
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<td>Preventative Maintenance: Traction Converter</td>
<td>Clean Heat Exchanger, Check Coolant, Examine Line Contactors, Examine High Voltage Terminals / Connections, Check Enclosures</td>
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<td>Preventative Maintenance: Brakes</td>
<td>Record Brake Pad / Disc Thicknesses, Record Track Brake Skid Thicknesses, Check Oil Level &amp; Hydro Pump Function, Check Brake Computer Function, Check Line Contactor Function, Record Battery Function, Check Emergency Pump Off Function, Check Cab Brake Functions</td>
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<td>22</td>
<td>0308+A2/0908</td>
<td>15000</td>
<td>1500</td>
<td>km</td>
<td>Inspection: Cab / Saloon &amp; Comms</td>
<td>Check all Cab Functions, Check PA, Check PEI, Check Cameras, Check Radio, Check Destination Board, Check Int / Ext Light, Check Door Function</td>
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<td>Activity Number</td>
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<td>26</td>
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<td>Preventative Maintenance: Doors</td>
<td>Check Door Operation Examine Door Linkages and Mechanical Equipment Test Door Interlock Check Emergency Release Lubricate Joints and Pivots Check Wiring: Security / Clearance</td>
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<td>Preventative Maintenance: Underframe &amp; Bogies</td>
<td>Examine 3-Phase Motor Connection Examine Cooling Hoses Check Wheel Tyre Torque Examine Traction Rod Bushes Examine Cabling / Pipes / Hoses Examine Bellows / Buckle / Floor Examine Buffers / Coupler Pocket Examine Dampers</td>
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<td>Preventative Maintenance: Pantograph</td>
<td>Record Carbon Thicknesses Lubricate all Bearings / Chain Examine Insulators Examine Surge arrester Examine Shunts Examine Motor Clean Insulators / Surge Arrester / Motor Cover Record Pan Uplift Force Check Operation</td>
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<td>0304+R2/0909</td>
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<td>Preventative Maintenance: Pantograph</td>
<td>Record Carbon Thicknesses Lubricate all Bearings / Chain Examine Insulators Examine Surge arrester Examine Shunts Examine Motor Clean Insulators / Surge Arrester / Motor Cover Record Pan Uplift Force</td>
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<td>27</td>
<td>0313+R0/0908</td>
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<td>Inspection:</td>
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<td>Examine Fans</td>
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<td>Clean All Enclosures</td>
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<td>Examine Earth Return Box / Spring</td>
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<td>Examine Earth Wiring / Terminals; Security / Clearance</td>
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<td>Examine Dog Bone</td>
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<td>Lubricate Coupler</td>
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<td>Check Coupler / Buffers</td>
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Activity Title: Check Operation; Test Cool / Heat; Check Coolant; Check Enclosures; Examine Fans; Clean All Enclosures; Clean A/C Coils; Renew A/C Filters; Preventative Maintenance: Earth Return; Record Earth Return Brush lengths; Change Earth Return Brush on Condition; Examine Earth Return Box / Spring; Examine Earth Wiring / Terminals; Security / Clearance; Check Presummer Inspection (External); Examine Fire Extinguisher (External); Lubricate Slewing Ring Bearing; Examine Bottom Articulation Connection; Examine Dog Bone; Lubricate Coupler; Check Coupler / Buffers.
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<td>Adjust Wheel Diameter Settings; VCU / ATP</td>
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<td>km</td>
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<td>Charge Signal Test Equipment; Husky PTE</td>
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<td>Activity Code</td>
<td>Interval</td>
<td>Tolerance</td>
<td>Unit</td>
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<td>Check Enclosures Clean Enclosures Examine Rodding; Tightness / Security / Clearance / Damage Examine Electrical Terminals / Connections Lubricate Gear</td>
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<td>9.2</td>
<td>day</td>
<td>Preventative Maintenance: Points</td>
<td>Check Enclosures Clean Enclosures Examine Rodding; Tightness / Security / Clearance / Damage Examine Electrical Terminals / Connections Lubricate Gear</td>
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<td>92</td>
<td>9.2</td>
<td>day</td>
<td>Preventative Maintenance: Points</td>
<td>Check Enclosures Clean Enclosures Examine Rodding; Tightness / Security / Clearance / Damage Examine Electrical Terminals / Connections Lubricate Gear</td>
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<td>0206+Y0/0909</td>
<td>92</td>
<td>9.2</td>
<td>day</td>
<td>Preventative Maintenance: Points</td>
<td>Check Enclosures Clean Enclosures Examine Rodding; Tightness / Security / Clearance / Damage Examine Electrical Terminals / Connections Lubricate Gear</td>
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<tr>
<td>01</td>
<td>0206+Y0/0909</td>
<td>92</td>
<td>9.2</td>
<td>day</td>
<td>Preventative Maintenance: Points</td>
<td>Check Enclosures Clean Enclosures Examine Rodding; Tightness / Security / Clearance / Damage Examine Electrical Terminals / Connections Lubricate Gear</td>
</tr>
<tr>
<td>01</td>
<td>0206+Y0/0909</td>
<td>92</td>
<td>9.2</td>
<td>day</td>
<td>Preventative Maintenance: Points</td>
<td>Check Enclosures Clean Enclosures Examine Rodding; Tightness / Security / Clearance / Damage Examine Electrical Terminals / Connections Lubricate Gear</td>
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<td>23</td>
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<td>150000</td>
<td>15000</td>
<td>km</td>
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<td>Renew all Fluoro Tubes</td>
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<tr>
<td>Activity Number</td>
<td>Activity Code</td>
<td>Interval</td>
<td>Tolerance</td>
<td>Unit</td>
<td>Activity Title</td>
<td>Scheduled maintenance activities</td>
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</tr>
<tr>
<td>10</td>
<td>0301+A2/0908</td>
<td>17000</td>
<td>1700</td>
<td>km</td>
<td>Inspection: Articulation</td>
<td>Check Articulation Bolt Torque&lt;br&gt;Examine Articulation Linkage&lt;br&gt;Examine Articulation Bearings&lt;br&gt;Check Bellows; Security / Clearance</td>
</tr>
<tr>
<td>06</td>
<td>0300+R0/0908</td>
<td>15000</td>
<td>1500</td>
<td>km</td>
<td>Inspection: Roof</td>
<td>Examine Pantograph Carbon Strips / Shunts&lt;br&gt;Check Pantograph Insulators / Surge Arrester; Damage&lt;br&gt;Check Roof Area; Debris / Damage&lt;br&gt;Check Roof Drains; Debris / Damage&lt;br&gt;Check A/C Air Intakes; Debris / Damage&lt;br&gt;Check Cabling / Roof Skirts; Security / Damage&lt;br&gt;Check Panels / Covers; Security / Damage&lt;br&gt;Clean Roof Drains&lt;br&gt;Examine Roof Dampers</td>
</tr>
<tr>
<td>04</td>
<td>0300+A1/0908</td>
<td>15000</td>
<td>1500</td>
<td>km</td>
<td>Inspection: External</td>
<td>Check Skirts; Security / Damage&lt;br&gt;Check Panels / Covers; Security / Damage&lt;br&gt;Check Windows / Door Glass; Security / Damage&lt;br&gt;Check Bellows; Security / Clearance&lt;br&gt;Lubricate External Locks</td>
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<td>18</td>
<td>0305+B0/0909</td>
<td>300000</td>
<td>30000</td>
<td>km</td>
<td>Preventative Maintenance: Traction Motor</td>
<td>Lubricate Traction Motor Bearings</td>
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<tr>
<td>13</td>
<td>0303+B0/0909</td>
<td>200000</td>
<td>20000</td>
<td>km</td>
<td>Preventative Maintenance: Trailer Wheel Bearings</td>
<td>Lubricate Trailer Wheel Bearings</td>
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<tr>
<td>03</td>
<td>0300+A0/0908</td>
<td>Daily</td>
<td>n/a</td>
<td>n/a</td>
<td>Inspection: Fitness for Traffic</td>
<td>General Check: Underframe&lt;br&gt;General Check: Roof&lt;br&gt;General Check: External&lt;br&gt;General Check: Internal</td>
</tr>
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</table>

Note: the term 'day' in this table means 'calendar day'
(ii) exterior washing of each Vehicle in accordance with paragraph (b) below;

(iii) maintenance and repairs to the onboard components of the Automatic Train Protection (ATP) system; and

(iv) all other scheduled maintenance to the Vehicles required to ensure that each Vehicle is Available.

(b) The Contractor’s personnel will operate the Vehicles through the exterior washing plant and the Contractor will provide the wash plant consumables associated with the daily exterior cleaning of the Vehicles. The Contractor will also provide the cleaning services listed in item 09 in the Variotram Scheduled Maintenance Regime. Any other external cleaning as well as all internal cleaning activities are excluded from the Scheduled Maintenance of the Vehicles.

2.3 Unscheduled Maintenance - Vehicles

The Contractor must carry all Unscheduled Maintenance to the Vehicles.

2.4 In-service inspections and field repairs

(a) With the prior agreement of the Operator and subject to paragraph (b), the Contractor may carry out inspections and/or Unscheduled Maintenance to the Vehicles whilst on the LRT.

(b) When conducting any inspection or Unscheduled Maintenance of a Vehicle contemplated by paragraph (a), the Contractor must:

(i) not disrupt the LRT or the operations of the Operator; and

(ii) comply with the Operator’s health and safety requirements relating to the LRT, its operation and the Vehicles.

2.5 Heavy Maintenance – Variotrams only

(a) The parties acknowledge and agree that, in respect of an Variotram, the repair and maintenance activities set out in the Table 2 below comprise Heavy Maintenance.

(b) Where the following list contains a number in the ‘Failures Per Contract Year’ column then only failures over and above the stated number are Heavy Maintenance. For the purposes of calculating the ‘Failures Per Contract Year’ in Table 2 below, only failures in the Variotrams are taken into account.

<table>
<thead>
<tr>
<th>System</th>
<th>Component</th>
<th>Failures Per Contract Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motor &amp; Trailer Bogie</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bogies</td>
<td>Frame</td>
<td>heavy maint’ action only</td>
</tr>
<tr>
<td>Bogies</td>
<td>Primary Spring</td>
<td>heavy maint’ action only</td>
</tr>
<tr>
<td>Bogies</td>
<td>Secondary Spring</td>
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<tr>
<td>System</td>
<td>Component</td>
<td>Failures Per Contract Year</td>
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<tr>
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<tr>
<td>Bogies</td>
<td>Vertical Damper</td>
<td>4</td>
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<td>Bogies</td>
<td>Lateral Damper</td>
<td>3</td>
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<td>Lateral Buffer</td>
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<tr>
<td>Bogies</td>
<td>Wheelsets</td>
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<tr>
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<td>Turning</td>
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<tr>
<td>Bogies</td>
<td>Wheel Rubbers</td>
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</tr>
<tr>
<td>Bogies</td>
<td>Re-tyring of resilient wheels</td>
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<td>Bearing (Outer &amp; Inner pair) - (Motor bogie only)</td>
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<td>Brake Disc</td>
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<td>Traction Motor (Motor bogie only)</td>
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<td>- Replacement of compressor mounts</td>
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<td>- Replacement of electrical contactors</td>
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<td>and relays</td>
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<td>- Replacement of timers</td>
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<td>- Replacement of solenoid coils</td>
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<td>Doors - Bowden Cables</td>
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<td>Doors - Pivot bushes</td>
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<td>Doors - Support Pivot bushes</td>
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<td>Doors - Motor Gearbox</td>
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<td>BCU - Replace back-up batteries</td>
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<td>PA / Destination Board - Replace back-up batteries</td>
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<td>Destination Equipment - Headboard</td>
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<td>Slewning Ring</td>
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<td>Body Frame</td>
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<tr>
<td>Body Floor</td>
<td>Replacement</td>
<td>heavy maint' action only</td>
</tr>
</tbody>
</table>

* - failures every 3 years
** - failures every 4 years
2.6 Heavy Maintenance Recommendation – Variotram

(a) The Contractor must provide to TfNSW as necessary notification of any Heavy Maintenance required to the Variotrams (Heavy Maintenance Recommendation Proposal), including any Heavy Maintenance which if left unattended may cause the Variotram to be Unavailable.

(b) The Heavy Maintenance Recommendation Proposal must include as a minimum the following:
   (i) an overview of the heavy maintenance requirement;
   (ii) rationale and justification of why the heavy maintenance activity is required including potential implications (both cost and safety) if the heavy maintenance is not carried out;
   (iii) detailed breakdown of the heavy maintenance activity providing a step by step guide to the major tasks including estimated man hours to carry out each task;
   (iv) locations that the work is to be carried out at;
   (v) list of materials and spares including costs;
   (vi) details of labour component including cost and time;
   (vii) details of the labour component that is to be carried out during Working Hours; and
   (viii) estimated time the Variotram is to be Unavailable for normal passenger service.

(c) TfNSW will, within 20 Business Days of receipt of a Heavy Maintenance Recommendation Proposal, notify the Contractor in writing of its decision to either:
   (i) proceed with the Heavy Maintenance in accordance with the Heavy Maintenance Recommendation Proposal;
   (ii) request an amendment to the Heavy Maintenance Recommendation Proposal;
   (iii) request more information from the Contractor; or
   (iv) not carry out the heavy maintenance activities detailed in the Heavy Maintenance Recommendation Proposal.
3. **Signalling Equipment**

3.1 **Scope of services – Signalling Equipment**

The repair and maintenance services for the Signalling Equipment comprises Scheduled Maintenance and Unscheduled Maintenance.

3.2 **Scheduled Maintenance – Signalling Equipment**

(a) During each Contract Year, the Contractor must carry out quarterly examinations of the Signalling Equipment.

(b) The quarterly examination must comprise:

**Table 3 - Quarterly Exam for Signalling Equipment**

<table>
<thead>
<tr>
<th>Maintenance Task</th>
<th>Task Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Points</td>
<td>Refer to 'Activity 01' in the Variotram Scheduled Maintenance Regime.</td>
</tr>
<tr>
<td>Inspect signals</td>
<td>This is a visual inspection of the signal for any abnormality. Can be done from tram if going slow enough. Certificate provided.</td>
</tr>
<tr>
<td>Test signal voltage</td>
<td>This is a detailed inspection of the signal and measurement of lamp voltages. Records are provided such as a card.</td>
</tr>
<tr>
<td>Inspect Relays</td>
<td>This is a visual inspection of the relays. They are not removed and maintenance records are provided. Sometimes inspect stickers are stuck to relay case.</td>
</tr>
<tr>
<td>Lube pts inspect FPL</td>
<td>This is lubrication to manufacturers manual. Also switch chairs. The FPL and detection is inspected. Records kept.</td>
</tr>
<tr>
<td>Test point machine</td>
<td>This is as per previous service but finer adjustments are made where appropriate. The clutch is tested and records completed.</td>
</tr>
<tr>
<td>Inspect track cct</td>
<td>This is a visual inspection of all the components for damage, security and connectivity. Voltage readings at receiver are taken and track shunted.</td>
</tr>
<tr>
<td>Inspect bonding</td>
<td>This is conducted at the same time as the track circuit inspection and is to check that all the traction connections are intact and have not been damaged or stolen.</td>
</tr>
<tr>
<td>Certify track circuits</td>
<td>This is a complete inspection and test of all track circuit elements. The tracks are shunt tested and history card completed.</td>
</tr>
<tr>
<td>Power supply AC/DC measure</td>
<td>This is an inspection and recording of busbar voltages and earth leakage. It is recorded on a card and compared for deviation.</td>
</tr>
<tr>
<td>Locations</td>
<td>This is an inspection of the cupboards and locations for security, egress and general condition. Location earths are measured and recorded. Lightning arrestors are inspected.</td>
</tr>
<tr>
<td>Maintenance Task</td>
<td>Task Description</td>
</tr>
<tr>
<td>------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Cables</td>
<td>This is the megger testing of PVC cables. They are disconnected from the circuit and meggered with a 500v megger. Test records are kept.</td>
</tr>
<tr>
<td>Test ATP Encoders</td>
<td>This can be done at the same time as the track certification test. It tests locally the encoder status with the signal system.</td>
</tr>
<tr>
<td>Inspect ATP Balises</td>
<td>This can be done with the track circuit inspection and is to check for conductivity of the connections and security of the fixture.</td>
</tr>
<tr>
<td>ATP onboard</td>
<td>This is a visual inspection of the correct operation of the onboard equipment with the working signalling system. It is designed to pick up abnormalities. It complements the encoder test.</td>
</tr>
<tr>
<td>Interlocking test</td>
<td>This is in line with RAC standards and tests the basic integrity of the system. It would be in the form of functioning of equip for the right outcome. A certificate is signed.</td>
</tr>
<tr>
<td>Annunciator test</td>
<td>This is normal practice and is in the form of a correspondence test from field objects to OCS. A certificate is usually provided.</td>
</tr>
<tr>
<td>Surveillance Inspection</td>
<td>This is a technical, supervisory and compliance audit. Its intention is to pick up potential problems. A report is generated. Sometimes there is a punch list.</td>
</tr>
</tbody>
</table>

(c) The Contractor must ensure that the tasks in each quarterly exam of the Signalling Equipment are carried out by a Qualified Signalling Engineer.

3.3 Unscheduled Maintenance – Signalling Equipment

The Contractor must carry out all first-line maintenance and repairs to the Signalling Equipment, including:

(a) re-lamp signals;

(b) attend to malfunctioning Points machines; and

(c) identification of any failures in the Signalling Equipment, fault diagnosis and attempt to rectify the failure.

4. Scope of services – Recovery of Vehicles

The Contractor must recover and deliver to the Stabling Facility any Vehicle that suffers a Failure on the LRT during Working Hours.

5. Scope of services – Maintenance Spares, TfNSW Spares and Specialist Maintenance Equipment

The Contractor must maintain the Maintenance Spares, TfNSW Spares and Specialist Maintenance Equipment:

(a) in accordance with the Maintenance Plans; and

(b) so as to ensure they remain in good working order and fit for purpose.
6. **Training**

(a) TfNSW and the Contractor will jointly determine the training and rail safety worker competence required to be provided to the Operator's personnel in the following areas:

(i) support services upon the occurrence of a Failure of a Vehicle on the LRT; and

(ii) driver training-first stage fault diagnosis, troubleshooting assistance and reporting,

in relation to the Vehicles and Signalling Equipment.

(b) Any inadequacies identified will be addressed by training. A training programme will be jointly agreed between TfNSW and the Contractor.

(c) The parties acknowledge and agree that the Contractor has made allowance in the Monthly Service Payment for 76 hours of training per annum to be provided by the Contractor to the Operator's personnel.
Annexure C

NOT USED
Annexure D

REPORTING REQUIREMENTS

1. The Contractor must, within 8 Business Days of the end of each month in a Contract Year, provide TfNSW with:

(a) the Monthly Performance Report for that month (and any Services outside that month to which the payment claim relates) (Payment Period), which as a minimum must include:

(i) details of any Availability Payment for that Payment Period together with all details used to calculate any Availability Payment, including the date, time, extent and duration of any Shortfall; and

(ii) any other information that TfNSW reasonably requires in relation to:

(A) any occasion of a Shortfall; or

(B) the calculation of the Availability Payment, in that Payment Period,

(collectively, the Performance Data); and

(b) the Monthly Maintenance Report for that month, which as a minimum must include:

(i) for any Additional Services in that month:

(A) details of the works and services undertaken as Additional Services;

(B) a breakdown of the costs incurred by the Contractor in carrying out those Additional Services, detailing:

(I) the direct labour costs; and

(II) the reasonable cost of Subcontractor work and materials required for the carrying out of the Additional Services, valued in accordance with Annexure H;

(ii) number of inspections completed versus forecast number of inspections in that month;

(iii) number of inspections deferred from that month;

(iv) forecast number of inspections for the next month;

(v) actual kilometerage of the fleet broken down by Vehicle;

(vi) mean distance between failures (MDBF) by equipment sub-system;

(vii) any key maintenance tasks or overhauls completed in that month;
(viii) any key maintenance tasks or overhauls due to take place in the next month;

(ix) status of any overhauls currently being undertaken;

(x) any departures from the Maintenance Plans in that month;

(xi) any planned departures from the Maintenance Plans in next month;

(xii) details of any incidents or near misses (of which the Contractor is aware); and

(xiii) any other information that TfNSW reasonably requires in relation to the Services.
Annexure E

REQUIREMENTS FOR CAMS AND ASSET REGISTER

1. CAMS

(a) The Contractor must ensure the CAMS:

(i) provides for and details, as a minimum, scheduling, prioritising and alerting of inspections and scheduled maintenance activities, inventory management (including rotables and spares), Asset maintenance and repair histories, configuration management, generation of work orders, bills of materials, tracking of costs and Asset warranty data;

(ii) documents the regular inspection of each maintainable component and documents any failure to meet the Maintenance Plans and must initiate an appropriate maintenance response;

(iii) is an industry recognised system, which TfNSW must have the right to use that system and to add to, modify or reproduce the data on that system;

(iv) has the facility to provide reports on the performance of any Asset by analysis of the specific condition and defect information recorded for individual Assets;

(v) has a facility to export data in common spreadsheet and database formats (e.g. Comma Separated Variable and Microsoft Access); and

(vi) has sufficient security measures to ensure that only authorised persons can gain access to the system.

(b) The Contractor must:

(i) within the CAMS, record the condition of all Assets;

(ii) ensure that the CAMS maintains a current accurate historical record of all required data and information. Each data item must be referenced with the date of the record as appropriate to the type of data;

(iii) ensure that the CAMS maintains accurate and complete data for all records by conducting 6 monthly data validation and integrity checks. Such checks include, but are not limited to, checking the accuracy and currency of the data entries and the completeness of the data;

(iv) ensure that TfNSW and persons nominated by TfNSW are able to gain access to CAMS in accordance with clause 23.2;

(v) ensure that the data contained in the CAMS is suitably backed up in an offsite location;

(vi) if requested, make available to TfNSW, and persons nominated by TfNSW, direct, cost-free, password-protected real time, access to the CAMS via terminal or internet; and
(vii) at the end of the Term ensure that any software licence relating to the CAMS is transferred to TfNSW and that all data contained in the CAMS is available to TfNSW.

2. **Asset Register**

The Contractor must, whether separate to or within the CAMS:

(a) implement and keep current a register of all Assets (**Asset Register**) that records, as a minimum, the following information for each of the Vehicles and all Signalling Equipment:

(i) supplier/vendor information;

(ii) serial number or alternative identifier;

(iii) configuration information;

(iv) maintenance history including full details of inspections, testing, scheduled and reactive maintenance undertaken (quantity, date and type/nature);

(v) periodic maintenance program information (including cross references to the Maintenance Plans);

(vi) condition records; and

(vii) Asset expended life - either chronological age, hours of use, kilometres run or such other parameter appropriate to the Asset and each Vehicle; and

(b) ensure the Asset Register is structured in layers comprising Asset Elements, Asset Types, Asset Items and, where appropriate, Asset Sub-Items.

In this Annexure E the following definitions apply:

**Asset** means all components of the Vehicles and/or the Signalling equipment.

**Asset Element** means the broader categorisation of the Assets Types as identified in the Asset Register.

**Asset Item** means a single occurrence of any Asset as identified in the Asset Register.

**Asset Sub-Items** means a component of an Asset Item which has a design life or maintenance requirements which vary from those of the Asset Item.

**Asset Type** means a distinct type of Asset.
Annexure I

TFNSW FACILITIES

1. Building

(a) TfNSW will provide the Contractor (free of charge) with appropriate office, electronics repair room ('clean room'), workshop space and ablution facilities at the Stabling Facility to enable the Contractor to perform the Services. Office space will be air-conditioned. The Contractor may install external telephone and data lines at its cost.

(b) The Contractor acknowledges that due to the limited space available at the Stabling Facility, no wheel lathe or milling machines will be available at the Stabling Facility.

(c) From the Commencement Date, the Contractor will have free and exclusive access to the Stabling Facility storeroom for storing consumables and replacement component parts for the Vehicles. The Contractor acknowledges that the Stabling Facility storeroom is not protected from air moisture or dust ingress. The Contractor must take all reasonable measures to protect sensitive or corrosive material from the effects of dust or a moist and salt heavy atmosphere.

2. Equipment at the Stabling Facility

(a) Subject to clause 7.4, the parties agree that the Stabling Facility is as at the date of this Contract equipped with the following equipment:

(i) Gantry Platform;
(ii) Gantry Hoist (1 tonne) over length of service road 2, which is proposed to be increased to 10 tonne;
(iii) 8 Jacks (6 combined to a set for a Variotram including 2 master jacks; 2 slave jacks are spares);
(iv) Rerailing Equipment;
(v) Bench Press;
(vi) Pedestal Drill;
(vii) Pedestal Grinder;
(viii) EPROM Programmer;
(ix) Welder (arc);
(x) Workbenches;
(xi) External Brake System Bleed Pump;
(xii) External Traction System Coolant Bleed Pump;
(xiii) Service road 1 Fall Arrest System;
(xiv) Service road 1, 2 and Hospital road Isolating switches;
(xv) Pantograph Lifting Beam;
(xvi) A/C Lifting Equipment; and
(xvii) Wheel Grinding Machine.

(b) The condition of the above equipment must be monitored by the Contractor and the Contractor must inform TfNSW when (and what) repairs are required to keep such equipment in good working order and fit for purpose.

3. **Car Parks**

TfNSW will use reasonable endeavours to ensure that, from the Commencement Date, the Contractor has use of two car park spaces.
Annexure J

DISPUTE RESOLUTION BOARD AGREEMENT DISPUTE RESOLUTION BOARD AGREEMENT
DATED [INSERT DATE]

Parties

Transport for New South Wales (TfNSW) of Level 6, 18 Lee Street, Chippendale 2008 (ABN 18 804 239 602) (TfNSW)
CAF Rail Australia Pty Ltd of Suite 2 Level 3 / 4 Kyabra Street, Newstead QLD 4006 (ABN 15 146 694 537) (the Contractor)
Max Tonkin of 28 Bellevue Ave Denistone NSW 2114
Tim Sullivan of PO Box 80 Oakdale NSW 2570
Graeme Peck of 6 Avona Crescent, Seaforth NSW 2092
(each a Member)

Background:

A. TfNSW and the Contractor have entered into the Contract for to maintain the Vehicles and the Signalling Equipment to be operated on the Sydney Light Rail.

B. Clause 37 of the Contract provides for a dispute resolution process through the establishment and the operation of a Dispute Resolution Board to assist in resolving disputes under the Contract.

C. This agreement sets out the rights, obligations and duties of the Members, TfNSW and the Contractor in relation to the Dispute Resolution Board and the disputes.

Operative provisions

1. Definitions and Interpretation

1.1 Definitions

In this agreement:

Confidential Information means any Information in any way relating or pertaining to, or connected or associated with, or incidental to, the Project or the business activities of TfNSW or the Contractor which is or has been obtained (in writing, orally or in any other form) from, or pursuant to discussions with TfNSW or the Contract or their related body corporates, advisors or agents.

Dispute Resolution Board means the dispute resolution board formed under clause 3 of this agreement.

Information means information, correspondence, data, reports, interpretations, forecasts, processes, formulae, procedures, techniques, computer programs, records, analysis, compilation, business plans, studies or other documents or material of whatever nature and embodied, contained, exhibited, displayed or conveyed in any form or manner (including in writing, orally, or in machine readable form, recorded or stored.
by or in any computer or information retrieval system, or recorded or stored by any
electronic magnetic, electromagnetic or other means).

**Members** means each of the three individuals appointed to the Dispute Resolution
Board in accordance with this agreement.

**Contract** means the deed between TfNSW, the Contractor [# insert names of any other
parties] dated [# insert date #].

**Project** means the project to deliver light rail vehicles for the purposes of the Sydney
Light Rail.

**Rules** means the rules to be followed by the Dispute Resolution Board when
determining disputes as set out in Schedule 1.

**Schedule of Fees and Disbursements** means the schedule of fees and disbursements
set out in Schedule 2.

### 1.2 Terms defined in the Contract

Words and phrases defined in the Contract and used in this agreement have the
meaning given to them in the Contract.

### 1.3 Interpretation

In this agreement:

(a) headings are for convenience only and do not affect interpretation;

and unless the context indicates a contrary intention:

(b) an obligation or a liability assumed by, or a right conferred on, 2 or more
persons binds or benefits them jointly and severally;

(c) **person** includes an individual, the estate of an individual, a corporation, an
authority, an association or a joint venture (whether incorporated or
unincorporated), a partnership and a trust;

(d) a reference to a party includes that party’s executors, administrators,
successors and permitted assigns, including persons taking by way of
novation and, in the case of a trustee, includes a substituted or an additional
trustee;

(e) a reference to a document (including this agreement) is to that document as
varied, novated, ratified or replaced from time to time;

(f) a reference to a statute includes its delegated legislation and a reference to a
statute or delegated legislation or a provision of either includes
consolidations, amendments, re-enactments and replacements;

(g) a word importing the singular includes the plural (and vice versa), and a word
indicating a gender includes every other gender;

(h) a reference to a party, clause, schedule, exhibit, attachment or annexure is a
reference to a party, clause, schedule, exhibit, attachment or annexure to or
of this agreement, and a reference to this agreement includes all schedules,
exhibits, attachments and annexures to it;

(i) if a word or phrase is given a defined meaning, any other part of speech or
grammatical form of that word or phrase has a corresponding meaning:
(j) includes in any form is not a word of limitation; and

(k) a reference to $ or dollar is to Australian currency.

2. Agreement to Prevail

2.1 The parties agree that if there is any inconsistency between the terms of this agreement and the Contract the terms of this agreement will prevail to the extent of the inconsistency.

2.2 This agreement is effective as of the date all parties sign this document and will continue, unless terminated earlier under this agreement, until it terminates in accordance with clause 37.8 of the Contract.

3. Formation of the Dispute Resolution Board

The parties acknowledge that the Dispute Resolution Board:

(a) has been formed; and

(b) must perform its obligations and functions under the Contract and this agreement.

4. Establishment of Procedures

(a) During the first meeting at the Site, the Dispute Resolution Board will, with the agreement of all parties, establish procedures for the conduct of its routine site visits and other matters (including procedures for discharging its advisory function under clause 37.9 of the Contract but excluding procedures for its dispute resolution role. This process will be governed by the Rules). Template procedures are included in Attachment 1 to this agreement.

(b) The Dispute Resolution Board may initiate, with the concurrence of TNSW and the Contractor, new procedures or modified procedures, whenever this is deemed appropriate.

(c) The parties agree to comply with the Rules in respect of any dispute referred to the Dispute Resolution Board pursuant to clause 37.2 of the Contract.

5. Dispute Resolution Board Member’s Obligations

5.1 Impartiality

Each Member agrees to consider fairly and impartially the disputes and other matters referred to the Dispute Resolution Board.

5.2 Independence

Each Member agrees to act honestly and independently in the performance of its obligations under this agreement (including the consideration of facts and conditions relating to a dispute).

5.3 General Duties

Each Member agrees to carry out his or her obligations as a Member of the Dispute Resolution Board:

(a) with due care and diligence;

(b) in compliance with the Contract and this agreement; and
6. **Costs and fees**

(a) TfNSW and the Contractor are jointly and severally liable for the payment of the Members' fees and disbursements, calculated in accordance with the Schedule of Fees and Disbursements.

(b) TfNSW and the Contractor agree as between themselves that:

(i) TfNSW will pay:

A. the Members' fees and disbursements, calculated in accordance with the Schedule of Fees and Disbursements;

B. any third party costs incurred in holding the conference referred to in clause 2 of the Rules, including any booking fee, room hire and transcript costs; and

incurred on a "retainer" basis.

(ii) they will each pay one half of:

A. the Members' fees and disbursements, calculated in accordance with the Schedule of Fees and Disbursements;

B. any third party costs incurred in holding the conference referred to in clause 2 of the Rules, including any booking fee, room hire and transcript costs; and

incurred in connection with the resolution of a dispute referred under clause 37.2(b) of the Contract.

(iii) they will each bear their own costs of and incidental to the preparation of this agreement and their participation in any decision process of the Dispute Resolution Board.

7. **TfNSW's Commitment and Responsibilities**

Except for its participation in the Dispute Resolution Board's activities as provided in the Contract and this agreement, TfNSW will:

(a) not solicit advice or consultation from the Dispute Resolution Board or the Members on matters dealing with:

(i) the resolution of disputes which may compromise the Dispute Resolution Board's integrity or compliance with this agreement; or

(ii) the conduct of its work under the Contract or resolution of other problems relating to the Project,

(iii) other than in accordance with clause 37.9 of the Contract

(b) act in good faith towards each Member and the Dispute Resolution Board; and

(c) comply with the reasonable requests and directions of the Dispute Resolution Board.
8. Contractor’s Commitments and Responsibilities

Except for its participation in the Dispute Resolution Board’s activities as provided in the Contract and this agreement, the Contractor will:

(a) not solicit advice or consultation from the Dispute Resolution Board or the Members on matters dealing with:
   (i) the resolution of disputes which may compromise the Dispute Resolution Board’s integrity or compliance with this agreement; or
   (ii) the conduct of its work under the Contract or resolution of other problems relating to the Project;
   (iii) other than in accordance with Clause 37.9 of the Contract.

(b) act in good faith towards each Member and the Dispute Resolution Board; and

(c) comply with the reasonable requests and directions of the Dispute Resolution Board.

9. Confidentiality

In relation to all Confidential Information disclosed to the Dispute Resolution Board during the resolution of a Dispute each Member agrees:

(a) to keep that information confidential;

(b) not to disclose that information except if compelled by law to do so;

(c) not to use that information for a purpose other than the resolution of the dispute; and

(d) to be bound by this obligation of confidentiality whether or not such confidential information is or later becomes in the public domain.

10. Conflict of Interest

If a Member, during the term as a Member, becomes aware of any circumstance that might reasonably be considered to affect the Member’s capacity to act independently, impartially and without bias, the Member must inform TfNSW and the Contractor and the other Members in writing immediately.

11. Liability

11.1 Liability

A Member is not liable to either TfNSW or the Contractor for any act or omission done in good faith and with due care and diligence.

11.2 Due Care and Diligence

For the purpose of clause 11.1, the parties agree that the Member’s act will have been done in good faith and with due care and diligence unless no reasonable person in the position of the Member would have so acted or made such an omission.

12. Indemnity

12.1 Indemnity
TfNSW and the Contractor jointly and severally indemnify each Member against all claims from a person not a party to this agreement for any act or omission done in good faith and with due care and diligence.

12.2 Due Care and Diligence

For the purpose of clause 12.1, the parties agree that the Member’s act will have been done in good faith and with due care and diligence unless no reasonable person in the position of the Member would have so acted or made such an omission.

13. Termination of agreement

Subject to clause 14.2, this agreement may be terminated by mutual written agreement of TfNSW and the Contractor.

14. Members’ Termination

14.1 Resignation

A Member may resign from the Dispute Resolution Board by providing 30 Business Days’ written notice to the other Members, TfNSW and the Contractor.

14.2 Termination

A Member may be terminated at any time if TfNSW and the Contractor agree to do so.

14.3 Re-Appointment

A replacement member may be appointed in accordance with clause 37.7 of the Contract. The parties and Members acknowledge that they and any new member must enter into a replacement agreement substantially similar to this agreement as a condition of a valid appointment of a replacement member under the terms of the Contract. This agreement will remain in force until a replacement to this agreement has been fully executed.

15. Governing Law

This agreement shall be governed by and construed in accordance with the laws of the State of New South Wales and all parties hereby submit to the exclusive jurisdiction of the courts of New South Wales.

15.1 Relationship of the Parties

This agreement is not intended to create any partnership, agency or joint venture with respect to any one or more of the parties.

15.2 Notices

All notices must be in writing and sent to the addresses on page 1 of this agreement.
Schedule 1 - Rules for DRB Decisions

1. Written Submissions

1.1 Within 14 days after the referral of a dispute to the Dispute Resolution Board under clause 37.2, of the Contract, Party A (ie the party who gave notice under clause 37.2 of the Contract) must, in addition to any particulars provided by Party A under clause 37.2 of the Contract, give the other party and the Dispute Resolution Board a written statement of the Dispute referred to the Dispute Resolution Board; any agreed statement of facts; and a written submission, which may include witness statements, on the dispute in support of Party A's contentions.

1.2 Within 14 days after the statement in clause 1.1 is served, the other party must give Party A and the Dispute Resolution Board a written response to Party A’s submissions.

1.3 If the Dispute Resolution Board considers it appropriate, Party A may reply in writing to the other party’s response in clause 1.2 within the time allowed by the Dispute Resolution Board.

1.4 If the Dispute Resolution Board decides further information or documentation is required for the determination of the dispute, the Dispute Resolution Board may direct one or more parties to provide such further submissions, information or documents as the Dispute Resolution Board may require.

1.5 The Dispute Resolution Board must disclose to both parties all submissions, further submissions, information and documents received.

1.6 If a party fails to make a written submission, the Dispute Resolution Board may continue with the process.

2. Conference

2.1 Either party may, in writing, request the Dispute Resolution Board to call a conference of the parties.

2.2 If neither party requests the Dispute Resolution Board to call a conference, the chairperson of the Dispute Resolution Board may nevertheless call a conference if they think it appropriate.

2.3 Unless the parties agree otherwise, the conference will be held at the Site.

2.4 At least 5 days before the conference, the Dispute Resolution Board must inform the parties in writing of the date, venue and agenda for the conference.

2.5 The parties must appear at the conference and may make submissions on the subject matter of the conference. If a party fails to appear at a conference of which that party had been notified under clause 2.4, the Dispute Resolution Board and the other party may nevertheless proceed with the conference and the absence of that party will not terminate or discontinue the decision making process.

2.6 The parties:

(a) may be accompanied at a conference by legal or other advisers; and

(b) will be bound by any procedural directions as may be given by the Dispute Resolution Board in relation to the conference both before and during the course of the conference.
2.7 The conference must be held in private.

2.8 If agreed between the parties, transcripts of the conference proceedings may be taken and made available to the Dispute Resolution Board and the parties on a private and confidential basis.

3. The Decision

3.1 As soon as possible after receipt of the submissions or after any conference and, in any event not later than [56] days after referral of a dispute to the Dispute Resolution Board's under clause 37.2 of the Contract (or such other period as the parties may agree), the Dispute Resolution Board must:

(a) determine the dispute between the parties; and

(b) notify the parties of that decision.

3.2 The decision of the Dispute Resolution Board must:

(a) be in writing stating the Dispute Resolution Board's decision and giving reasons;

(b) be made on the basis of the submissions (if any) of the parties, the conference (if any), and the Dispute Resolution Board's own expertise; and

(c) meet the requirements of the Contract.

3.3 If the Dispute Resolution Board's decision contains a clerical mistake, an error arising from an accidental slip or omission, a material miscalculation of figures, a material mistake in the description of any person, matter or thing, or a defect in form, the Dispute Resolution Board must correct the decision.

4. Modification

These rules may be modified only by agreement of TfNSW and the Contractor.
Schedule 2 - Fees and disbursements
SIGNED as an agreement

Signed for and on behalf of the Transport for New South Wales ABN 18 804 239 602 by its authorised signatory, in the presence of:

Signature of Witness

Full name of witness

Signature of authorised signatory

Full name of authorised signatory

Signed for and on behalf of the [Contractor] by its authorised signatory, in the presence of:

Signature of Witness

Full name of witness

Signature of authorised signatory

Full name of authorised signatory

Signed for and on behalf of the [Member] by its authorised signatory, in the presence of:

Signature of Witness

Full name of witness

Signature of authorised signatory

Full name of authorised signatory
Signed for and on behalf of the [Member] by its authorised signatory, in the presence of:

Full name of witness
Signature of witness

Full name of witness
Signature of witness

Full name of witness
Signature of witness

Full name of witness
Signature of witness

Full name of authorised signatory
Signature of authorised signatory

Full name of authorised signatory
Signature of authorised signatory

Full name of authorised signatory
Signature of authorised signatory

Full name of authorised signatory
Signature of authorised signatory
ATTACHMENT 1

Dispute Resolution Board General Operating Procedures

1 General

1.1 The role of the Dispute Resolution Board is to provide specialised expertise in technical and administration aspects of the Contract in order to assist the parties to the Contract in resolving disputes and other matters in a timely and equitable manner.

1.2 The parties to the Contract shall not solicit advice or consultation from the Dispute Resolution Board or its members on matters dealing with the conduct of the work or resolution of problems except in accordance with the Contract.

1.3 The Contractor will furnish to each of the Dispute Resolution Board members all documents necessary for the Dispute Resolution Board to perform its functions, including copies of all Contract documents plus periodic reports, such as progress reports, minutes of weekly or other contract control group meetings, site meetings or similar meetings and any other documents that would be helpful in informing the Dispute Resolution Board members of disputes and other matters.

1.4 It must be clearly understood that individual Dispute Resolution Board members are not the representative of the party which appointed that representative. The entire Dispute Resolution Board must function as an objective, impartial and independent body at all times.

1.5 In order to avoid any suggestion of partiality, there should be no individual communication between Dispute Resolution Board members and employees of the parties to the Contract during the life of the Dispute Resolution Board. The parties to the Contract must direct any matters needing attention between meetings of the Dispute Resolution Board to the chair of the Dispute Resolution Board.

2 Frequency of Regular Meetings and Site Visits

2.1 The frequency and scheduling of meetings and site visits necessary to keep the Dispute Resolution Board properly informed of the project circumstances will generally be agreed between the Dispute Resolution Board and the parties to the Contract.

2.2 In the case of a failure to agree between the Dispute Resolution Board and the parties to the Contract, the Dispute Resolution Board will schedule the meetings and visits as it sees fit.

2.3 The frequency of meetings of the Dispute Resolution Board should generally be not more than three monthly but this may be influenced by work progress, unusual events and the number and complexity of potential disputes.

3 Agenda for Regular Meetings

3.1 The chair will develop an agenda for each regular meeting in accordance with the requirements of the Contract.

3.2 At the conclusion of the meeting, the Dispute Resolution Board will generally inspect the Vehicles and Signaling Equipment and the Site in the company of representatives of both parties to the Contract. Any Vehicles and Signaling Equipment and areas of the Site that are or may be the subject of any potential dispute will be pointed out by the parties to the Contract.

4 Minutes of Meetings
4.1 TfNSW will prepare minutes of the regular meetings of the Dispute Resolution Board and these draft minutes will be circulated to the Dispute Resolution Board members for comments, additions and corrections.

4.2 Minutes as amended will be adopted by the Dispute Resolution Board members at the next meeting.
Part 2 - Criteria for Members of Dispute Resolution Board

1. Criteria

Each nominee must meet the following criteria:

(a) **Experience**
   
   It is desirable that all Dispute Resolution Board members (DRB members) be experienced in the maintenance of Vehicles and Signaling Equipment required, interpretation of project documents and resolution of construction issues or disputes.

(b) **Neutrality**
   
   (i) The DRB members must be neutral, act impartially and be free of any conflict of interest.
   
   (ii) For the purposes of this clause, the term "member" also includes the member's current primary or full time employer, and "involved" means having a contractual relationship with either party to the Contract, or any other entity, such as a subcontractor, design professional or consultant having a role in the project.

(c) **Prohibitions and disqualifying relationship for prospective members**
   
   DRB members must not have:
   
   (i) an ownership interest in any entity involved in the project, or a financial interest in the project except for payment for services on the Dispute Resolution Board;
   
   (ii) previous employment by, or financial ties to, any party involved in the project within a period of 2 years prior to award of the Contract, except for fee-based consulting services on other projects;
   
   (iii) a close professional or personal relationship with any key member of any entity involved in the project which, in the judgment of either party, could suggest partiality; or
   
   (iv) prior involvement in the project of a nature which could compromise that member's ability to participate impartially in the Dispute Resolution Board's activities.

(d) **Prohibitions and disqualifying relationships for members**
   
   The following matters may be construed as a conflict of interest in respect of a member:
   
   (i) the member being employed within the past 2 years, including for fee based consulting services, by any entity involved in the project except with the express approval of both parties; or
   
   (ii) the member entering into discussions concerning, or making an agreement with, an entity involved in the project regarding employment after the project is completed.

2. **Disclosure Statement**

   A disclosure statement for each nominee must be submitted. Each disclosure statement must include:
   
   (a) a resume of relevant experience;
(b) a declaration describing all past, present, anticipated and planned future relationships, including indirect relationships through the prospective member's primary or full-time employer, to the project and with all entities involving the project, including subcontractors, design professionals and consultants; and

(c) disclosure of close professional or personal relationships with any key members of any entity involved in the project.
Annexure N

OPERATION MANUALS

Note: Variotram Operation Manuals – refer to the existing Variotram Operation Manuals issued by Bombardier Transportation Australia
OPERATING & MAINTENANCE MANUALS

INDEX

1. OPERATING & MAINTENANCE MANUALS ........................................ 2
   1.1. GENERAL .................................................................................. 2
   1.2. DRIVING AND OPERATIONAL MANUAL (DOM) .......................... 4
   1.3. MAINTENANCE AND REPAIR MANUAL (MRM) ......................... 9
   1.4. DESCRIPTIVE MANUAL (DM) .................................................. 14
   1.5. FAULTFINDING MANUAL (FM) ............................................... 17
   1.6. PARTS CATALOGUE (PC) .......................................................... 19
   1.7. INTERACTIVE ELECTRONIC TECHNICAL MANUAL ................... 20
1. OPERATING & MAINTENANCE MANUALS

1.1. GENERAL

As part of the overall documentation supplied by CAF with the vehicles, it is included a wide number of Operating and Maintenance Manuals. These documents are generally available for the Urbos 3 family of CAF Trams, while those are reviewed and amended as needed, in order to develop proper documents specifically created for every single new project. This provides a good result in terms of solid documentation, but at the same time with the assurance of having a tailored and customised manuals for the particular new tram vehicle.

CAF will provide a full set of operating and maintenance documentation, written in English, in accordance with the Delivery Programme (Tram Specification Table 33.1).

<table>
<thead>
<tr>
<th>Documentation</th>
<th>Delivery Time of draft Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Drivers Manual</td>
<td>Before delivery of the 1st Tram</td>
</tr>
<tr>
<td>2. Rescue &amp; Recovery Manual</td>
<td>Before delivery of the 1st Tram</td>
</tr>
<tr>
<td>3. Tram Maintenance Schedule</td>
<td>Before delivery of the 1st Tram</td>
</tr>
<tr>
<td>4. Tram Maintenance Instruction</td>
<td>Before delivery of the 1st Tram</td>
</tr>
<tr>
<td>5. Tram Maintenance Procedures</td>
<td>Before delivery of the 1st Tram</td>
</tr>
<tr>
<td>6. Component Exchange Information</td>
<td>Before delivery of the 1st Tram</td>
</tr>
<tr>
<td>7. Component Overhaul Instructions</td>
<td>Before delivery of the 1st Tram</td>
</tr>
<tr>
<td>8. Technical Description Manual</td>
<td>Before delivery of the 1st Tram</td>
</tr>
<tr>
<td>9. Illustrated List of Spares</td>
<td>Before delivery of the 1st Tram</td>
</tr>
<tr>
<td>10. Interior and exterior cleaning instructions</td>
<td>Before delivery of the 1st Tram</td>
</tr>
</tbody>
</table>

CAF will provide operating manuals for the Trams in advance of the delivery of the first Tram including:

- Drivers Manual
- Rescue and Recovery Manual

CAF will provide maintenance manuals and fault-finding guides appropriate for the position of the Trams in the maintenance cycle in advance of the requirement to use them. Documents as follows:

- Tram Maintenance Schedule
- Tram Maintenance Instruction
- Tram Maintenance Procedures
CAF proposal for the Operating and Maintenance Manuals would consist on keeping the general structure of documentation which is already in use for previous CAF Urbos 3 vehicles. The following table presents the correspondence of contents of the Manuals requested in the Tram Specification vs the Urbos 3 Documentation:

<table>
<thead>
<tr>
<th>CENTRO Technical Spec</th>
<th>Urbos 3 Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driver’s Manual</td>
<td>DOM (Driving and Operation Manual)</td>
</tr>
<tr>
<td>Rescue &amp; Recovery Manual</td>
<td></td>
</tr>
<tr>
<td>Tram Maintenance Schedule</td>
<td></td>
</tr>
<tr>
<td>Tram Maintenance Instruction</td>
<td></td>
</tr>
<tr>
<td>Tram Maintenance Procedures</td>
<td>MRM (Maintenance and Repair Manual) (includes preventive and corrective maintenance, exchange procedures, overhauls and exterior/interior cleaning procedures)</td>
</tr>
<tr>
<td>Component Exchange Information</td>
<td></td>
</tr>
<tr>
<td>Component Overhaul</td>
<td></td>
</tr>
<tr>
<td>Interior and exterior cleaning instructions</td>
<td></td>
</tr>
<tr>
<td>Technical Description Manual</td>
<td>DM (Descriptive Manual)</td>
</tr>
<tr>
<td></td>
<td>FM (Faultfinding Manual)</td>
</tr>
<tr>
<td>Illustrated List of Spares</td>
<td>PC (Parts Catalogue)</td>
</tr>
</tbody>
</table>
1.2. **DRIVING AND OPERATIONAL MANUAL (DOM)**

The Driving and Operation Manual contains all the information needed for the optimum operation of the Tram.

This manual is designed to ease its use as much as possible.

The Operator's Manual is organized in different sections:

1. Introduction.

2. Vehicle description: The operator should have a working knowledge of the unit before operating the Tram. This section describes the most important features of the vehicle which although the operator may not be in position to control or adjust, should have some basic knowledge of.

3. Cab and car controls: The driver should be familiar with all the cab and carbody controls: Location, function and operation of controls, gauges, indicators and switches.

4. Normal driving mode: The operator should be adequately trained in current operations of the Tram.

5. Emergency/Degraded operation: The operator should be adequately trained in the emergency or degraded operation of the Tram. Rescue and recovery procedures are integrated in this section.

6. Cab terminal – Man Machine Interface (MMI): This section contains a description of the cab terminal screens.

Find attached some examples of a previous Urbos 3 project.
2.5 OBSTACLE DEFLECTOR SYSTEM

In front of the tram, under the cab, an obstacle deflector system is mounted whose aim is to remove all obstacles in its path.

The system is designed to automatically adjust free clearance between tram and rail.

2.6 DOORS

2.6.1 Passenger Access Doors

The tram is provided with a total of six doors, one single leaf door located in modules C1 and C2, and two double leaf doors located in suspended modules S1 and S2. Module M has no doors.

The doors are automatic sliding plug type, electrically operated and microprocessor controlled:

- Free opening (single leaf).................. 800 mm.
- Free opening (double leaf)............... 1300 mm.

Figure 2-8. Access door diagram.

The door leaves are made of tempered glass with the same characteristics as the saloon windows.

Each door, single or double leaf, is provided with the following devices:

- Door Control Unit (DCU) (1), which operates the opening and closing of the door depending on the signals received from the door area (e.g. limit switches, light barrier, etc.) and the cab (e.g. door enable, low speed, central opening, etc.). The DCU is located above each door behind a hatch. All DCU are linked together and connected via the CAN bus to the TCMS.
### 3.1 DRIVER'S DESK

![Diagram of Driver's Desk](image)

**Figure 3.1. Driver's desk.**

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Control panel 1. Master controller</td>
<td>--</td>
<td>Refer to Section 3.1.1</td>
</tr>
<tr>
<td>2</td>
<td>Control panel 2. Speedometer</td>
<td>--</td>
<td>Refer to Section 3.1.2</td>
</tr>
<tr>
<td>3</td>
<td>Control panel 3. Left pushbutton panel</td>
<td>--</td>
<td>Refer to Section 3.1.3</td>
</tr>
<tr>
<td>4</td>
<td>Control panel 4. Right pushbutton panel</td>
<td>--</td>
<td>Refer to Section 3.1.4</td>
</tr>
<tr>
<td>5</td>
<td>Control panel 5. Switches panel</td>
<td>--</td>
<td>Refer to Section 3.1.5</td>
</tr>
<tr>
<td>6</td>
<td>Control panel 6. Security brake mushroom panel</td>
<td>--</td>
<td>Refer to Section 3.1.6</td>
</tr>
<tr>
<td>7</td>
<td>Man Machine Interface (MMI)</td>
<td>85A03</td>
<td>TCMS cab terminal</td>
</tr>
<tr>
<td>8</td>
<td>Rear view CCTV monitor</td>
<td>85A13</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>85A14</td>
<td></td>
</tr>
</tbody>
</table>
4.6 DRIVING THE TRAM

The tram is manually operated being the driver who controls all movements of the tram.

Restricted manual modes:

The reduced speed modes are used during operations in the washing tunnel, coupling, workshop and manoeuvres.

- Speed limited to 10 km/h. Direction selector switch (20S01) set to “10 km/h” position.
- Speed limited to 3 km/h. Direction selector switch (20S01) set to “3 km/h” position.
- Reverse mode. Direction selector switch (20S01) set to “▼” (reverse) position and reverse gear permission switch (20S02) actuated.

In reverse mode, the speed is automatically limited to 5 km/h.

Driving the tram:

1. Check that all access doors are closed. Otherwise, close doors through the access doors pushbutton (50S01) previously actuated (pushbutton lamp ON).
5.8 PANTOGRAPH EMERGENCY OPERATION

To raise/lower the pantograph rotate the crank left/right until the safety clutch engages.

About 80 turns are needed to fully raise the pantograph.

In the event that the pantograph driven mechanism fails to work, the driver can raise and lower the pantograph manually using a crank located in one of the hinged panels in module M, refer to Figure 2-6.

The spindle drive for raising the pantograph is accessible from the interior of the vehicle without removing any ceiling panel or hatch.

5.9 OPENING OF HSCB WITH THE VEHICLE IN MOVEMENT

Fault:
- Fault or overcurrent detection in traction equipment.
- Alarm on cab terminal (TBS).

Action:
Close the HSCB by means of HSCB connection pushbutton (13S01) located on the driver's desk or HSCB on virtual button in cab terminal, HIGH VOLTAGE DRIVING screen.

Configuration:
Not applicable.

Limitations:
None.
1.3. MAINTENANCE AND REPAIR MANUAL (MRM)

The Maintenance and Repair Manual comprises a set of documents, as follows

a) Maintenance Plan

All the programmed maintenance instructions to be performed on the Urbos3 Platform are listed in this section. The instructions are grouped by the primary system code and are in order of code. The following figure provides a snapshot of a previous example of Maintenance Plan for a Urbos 3 project:

<table>
<thead>
<tr>
<th>Code</th>
<th>SC</th>
<th>Instruction</th>
<th>Localisation</th>
<th>Frequency</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAT-01-001</td>
<td>1</td>
<td>Pantograph-Change Shunt Connections</td>
<td>Roof</td>
<td>✓</td>
<td>2x2V (2 years) depending on state</td>
</tr>
<tr>
<td>CAT-03-001</td>
<td>1</td>
<td>High Speed Circuit Breaker-Basic Inspection</td>
<td>Roof</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>CAT-03-002</td>
<td>N/A</td>
<td>High Speed Circuit Breaker-Major Inspection</td>
<td>Roof</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>CAT-03-501</td>
<td>N/A</td>
<td>High Speed Circuit Breaker-Main Circuit Overhaul</td>
<td>Roof</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>CAT-03-503</td>
<td>N/A</td>
<td>High Speed Circuit Breaker-Closing Device Overhaul</td>
<td>Roof</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>CAT-03-504</td>
<td>N/A</td>
<td>High Speed Circuit Breaker-Over-Curr Release</td>
<td>Roof</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>CAT-03-505</td>
<td>N/A</td>
<td>High Speed Circuit Breaker-Closing Shock Absorber</td>
<td>Roof</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>CAT-99-001</td>
<td>1</td>
<td>Lighting Arrester-Inspect Visually</td>
<td>Roof</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>CAT-99-002</td>
<td>1</td>
<td>Lighting Arrester-Clean</td>
<td>Roof</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

**CAU Auxiliary Converter**

<table>
<thead>
<tr>
<th>Code</th>
<th>SC</th>
<th>Instruction</th>
<th>Localisation</th>
<th>Frequency</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAU-00-001</td>
<td>1</td>
<td>Auxiliary Converter Box-Inspect Visually</td>
<td>Roof</td>
<td>✓</td>
<td>Check after 6 months in service</td>
</tr>
<tr>
<td>CAU-00-002</td>
<td>1</td>
<td>Auxiliary Converter Box-Clean</td>
<td>Roof</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>CAU-00-003</td>
<td>1</td>
<td>Auxiliary Converter Box-Check Fasteners</td>
<td>Roof</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>CAU-00-506</td>
<td>1</td>
<td>Auxiliary Converter Box-Change Pn</td>
<td>Roof</td>
<td>✓</td>
<td>6x2V (6 years)</td>
</tr>
<tr>
<td>CAU-05-513</td>
<td>1</td>
<td>PCB-Change Timekeeper Snap Hat Battery</td>
<td>Roof</td>
<td>✓</td>
<td>6x2V (6 years)</td>
</tr>
</tbody>
</table>

**CLC HVAC (Cab)**

<table>
<thead>
<tr>
<th>Code</th>
<th>SC</th>
<th>Instruction</th>
<th>Localisation</th>
<th>Frequency</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>CLC-00-001</td>
<td>1</td>
<td>Cab HVAC-inspect</td>
<td>Roof</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

This document does also present the correspondent Control Sheets for a proper traceability of the maintenance jobs carried out. Again an example of this is provided simply for information purposes.
### Frequency 1V

<table>
<thead>
<tr>
<th>Code</th>
<th>Instruction</th>
<th>Localisation</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOG-01-002</td>
<td>Axle Bridge-Check Distance between Wheels</td>
<td>Under frame</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOG-01-003</td>
<td>Wheels-Check Geometry</td>
<td>Under frame</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOG-01-004</td>
<td>Axle Bridge-Check Fasteners</td>
<td>Under frame</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOG-01-005</td>
<td>Speed Sensor-Inspect Visually</td>
<td>Under frame</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOG-01-010</td>
<td>Earthing Device-Inspect Visually</td>
<td>Under frame</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOG-01-016</td>
<td>Brake Discs-Check Date</td>
<td>Under frame</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOG-01-018</td>
<td>Brake Discs-Check Cooling Channels for Foreign Objects</td>
<td>Under frame</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOG-02-001</td>
<td>Primary Suspension-Inspect Visually</td>
<td>Under frame</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOG-02-002</td>
<td>Primary Suspension-Check Fasteners</td>
<td>Under frame</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOG-02-003</td>
<td>Primary Suspension-Check Height</td>
<td>Under frame</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOG-03-001</td>
<td>Bogie Frame-Inspect Visually</td>
<td>Under frame</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOG-03-002</td>
<td>Lifeguard-Inspect Visually</td>
<td>Under frame</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOG-04-001</td>
<td>Secondary Suspension-Inspect Visually</td>
<td>Under frame</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOG-04-002</td>
<td>Secondary Suspension-Check Fasteners</td>
<td>Under frame</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOG-04-003</td>
<td>Lateral Stop-Check Wear</td>
<td>Under frame</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOG-04-005</td>
<td>Rotation Stop-Check Wear</td>
<td>Under frame</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOG-06-002</td>
<td>Sanders and Lifeguard-Check Fasteners</td>
<td>Under frame</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOG-06-007</td>
<td>Sanding System-Check Sealing</td>
<td>Under frame</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOG-06-008</td>
<td>Separator Filter-Check Condition</td>
<td>Under frame</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOG-06-009</td>
<td>N/A Separator Filter-Clean Filtering Element</td>
<td>Under frame</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOG-08-001</td>
<td>Wheel Flange Lubrication System-Check Operation</td>
<td>Under frame</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOG-08-003</td>
<td>Wheel Flange Lubrication System-Check Visually</td>
<td>Under frame</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**b) Maintenance and Repair instructions**

This section of the MRM manual contains all the information needed to carry out the scheduled and arising (corrective) maintenance of the tram vehicles. This includes assembly and disassembly instructions, adjustments and tests required for the tram equipments.

The contents of this Manual would typically include vehicle maintenance instructions, principally for use by staff involved in servicing and Maintenance. It shall cover job descriptions for examination work and any other jobs required on a seasonal basis, or following equipment failure.

This will include seasonal precautions and post incident testing. It shall also include the periodicities at which the specific Maintenance is to be carried out.

Technical procedures required as a result of work arising from an examination shall also be included and indexed.

This document does also account for tasks involved in overhaul. It shall contain overhaul requirements, the periodicities, abnormal work arising and details for removal/refitting and on Vehicle testing of components. It shall make reference to component overhaul instructions, and other documents relevant to overhaul, i.e. drawings and safety data sheets.
Again in order to provide some visual example of this manual, find below an example of maintenance job description from a previous Urbos 3 vehicle.

Belgrade Tram

<table>
<thead>
<tr>
<th>Fan Contactor Panel - Change AC Current Contactor</th>
<th>MAINTENANCE MANUAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAU-01-506</td>
<td></td>
</tr>
</tbody>
</table>

**JOB CODE - CAU-01-506**

**Fan Contactor Panel - Change AC Current Contactor**

**MODULES**

<table>
<thead>
<tr>
<th>C1:</th>
<th>S1:</th>
<th>M:</th>
<th>S2:</th>
<th>C2:</th>
</tr>
</thead>
</table>

**TOOLS**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Reference</th>
<th>Qty.</th>
</tr>
</thead>
</table>

**CONSUMABLES**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Reference</th>
<th>Qty.</th>
</tr>
</thead>
</table>

**REPLACEMENT PARTS**

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Reference</th>
<th>Qty.</th>
</tr>
</thead>
</table>

**SAFETY REQUIREMENTS**

**STOP**

SAFETY REQUIREMENTS INCLUDED WITHIN SECTION 2 - INTRODUCTION MUST BE ADHERED BEFORE ANY WORK IS UNDERTAKEN.

SAFETY CONDITION: SC1.

**STOP**

SWITCH OFF THE TRAM AND WAIT FOR MORE THAN 1 MINUTE BEFORE OPENING THE COVER OF THE AUXILIARY CONVERTER BOX. A RESIDUAL VOLTAGE CAN STILL BE PRESENT ON THE COMPONENTS IN THE INSTALLATION AREA BECAUSE OF THE CAPACITOR MODULES. WORK ON THE INSTALLATION AREA MAY NOT BE COMMENCED UNTIL ALL RESIDUAL VOLTAGES ARE LESS THAN 42 VDC.

**STOP**

ISOLATE ELECTRICAL SUPPLY TO THE FAN CONTACTOR PANEL BY OPENING THE CIRCUIT BREAKER 08F35 OR 08F39 AS REQUIRED, LOCATED IN THE C2 CIRCUIT BREAKER PANEL AND IN SALOON HINGED PANEL, IN MODULE M. PLACE A "DO NOT TOUCH DANGER MEN AT WORK" SIGN ON THE CIRCUIT BREAKER.

**STOP**

Make sure that no tools or other loose parts are left on the vehicle roof.

CAU-01-506  Rev: 0-May. 2011  1
PROCEDURE

1 - REMOVAL

1. Remove the lid of the auxiliary converter box, refer to CAU-00-502.
2. Remove all electrical and mechanical components that could hamper the removal process.
3. Remove any detached cables and lines so that the cables and lines cannot be damaged during removal of the device.
4. Remove the following electrical connections on the component to be replaced.

<table>
<thead>
<tr>
<th>AC current contactor K1 electrical connections.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connection</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>K1:1</td>
</tr>
<tr>
<td>K1:2</td>
</tr>
<tr>
<td>K1:3</td>
</tr>
<tr>
<td>K1:4</td>
</tr>
<tr>
<td>K1:5</td>
</tr>
<tr>
<td>K1:6</td>
</tr>
<tr>
<td>K1E1+</td>
</tr>
<tr>
<td>K1A2-</td>
</tr>
</tbody>
</table>

5. Release the AC current contactor K1 (1) with the auxiliary switch block K31 (2) from the support rail (3) of the fan contactor panel (4).
6. Release the AC current contactor K1 (1) from the auxiliary switch block K31 (2).

2 - REINSTALLATION

1. Mount the AC current contactor K1 (1) on the auxiliary switch block K31 (2).
2. Mount the AC current contactor K1 (1) (R1), with the auxiliary switch block K31 (2) (R2) onto the support rail (3) of the fan contactor panel (4).
3. Secure the electrical connections, refer to the table.
4. Restore the installation space of the fan contactor panel to its original condition:
   a. Remove all cable and line attachments which had been put in place for installation of the device.
   b. Reinstall any electrical and mechanical components, which were removed to enable installation of the device, in the corresponding installation spaces. Secure any electrical connections that had been disconnected.
   c. Install the lid of the auxiliary converter box, refer to CAU-00-502.
Belgrade Tram
Fan Contactor Panel - Change AC Current Contactor

MAINTENANCE MANUAL

CAU-01-506

Figure 1. AC current contactor K1 with auxiliary switch block K31 mounting.
1.4. DESCRIPTIVE MANUAL (DM)

This document is organised by equipments and main parts of the vehicle, and will show a detailed technical description of those. This allows for the Maintenance staff to get familiar with the different equipments and better understand their functionalities.

The manuals contain pictures, schematics and drawings which allow for an easy understanding and interpretation of their description, as well as the specifications of each device.

The aim of the DM is to provide information for reference when more difficult faults or problems occur. It will also be used for future reference by technical staff, particularly by the end Customer.

Find below an example of a section of the Descriptive Manual from a previous Urbos 3 vehicle.
SECTION 7 - Brake system

7.2.1.4 HVI

The Hydraulic Vehicle Interface (HVI) modules (1), are used to manage the friction brake force in motor bogies according to the brake demand received from the TCU. The HVI modules are located in C1 and C2 modules beside the SSM module (2).

The traction unit (TCU) receives the order to brake from the master controller and calculates the quantity of brake effort to apply. The HVI module collects the brake demand of the TCU in brake steps and converts the signal into an analogue signal for the HPU. The HVI module is converting digital input commands into predefined output current steps to the valve, corresponding to pressure values. This allows a simple interface between traction control and the brake system.

HVI module is not providing diagnostic functions, wheel slide protection control, jerk limitation or safety braking.
There are 2 sets of different brake calliper units, for motor, rear motor and trailer bogie, according to assembly:

- Motor bogie: Right (1, Figure 7-7) and left (2).
- Rear motor bogie: Right (1, Figure 7-8) and left (2).
- Trailer bogie: Right (1, Figure 7-9) and left (2).

The hydraulic brake calliper units are an inverse type, spring loaded. When there is no pressure supply, the stable state of the inverse floating actuator means that maximum braking force is applied. Therefore, loss of pressure in the hydraulic circuit causes the brake to be applied directly.

In the motor and rear motor bogies the units are fixed to the gear units by means of supports and in the trailer bogie the units are suspended from the bogie frame through a support.

Through the callipers two braking modes are applied, the inverse service brake applied by a spring and the holding brake.

The units include a quick clearance regulator, drive by means of two nuts, to compensate for wear on the disk and brake pad. It also has a quick manual mechanical unlocking device to disable the spring brake, which is mainly used to substitute the brake pads and in case the hydraulic pressure fails.
1.5. **FAULTFINDING MANUAL (FM)**

The faultfinding manual document is equally arranged by tram equipments, and it basically contains the information to analyse a system fault, understand its causes and carry out the remedial actions in order to return to its normal working condition.

This manual is expected to be used by Maintenance staff. The information related to failures which can be solved by the driver is to be documented in the Operating Manual.

Find below an example of a section of the Descriptive Manual from a previous Urbos 3 vehicle.
3.1 PASSENGER ACCESS DOORS

3.1.1 General

For diagnostic purposes the door control unit provides:

- A diagnostic software module that continuously monitors the door functions to detect abnormal conditions by plausibility checks.
- If an error is detected, the corresponding error code is indicated on the red "Error" LED on the DCU by a flashing code.
- A failure in the DCU hardware or missing software in the system memory is indicated by a steady illuminated red "Error" LED.
- With the diagnostic software DIAG V3, the diagnostic data of the DCU can be read out and memorized, refer to Maintenance and Repair Manual (MRM), Section 7 – Appendix.
- The diagnostic data is transmitted to the vehicle control via the ETHERNET bus system.

3.1.2 Indicator LEDs

The LEDs on the front panel of the door control unit allow an easy check of the door system without any need or additional measuring equipment.

The following conditions are indicated on the door control unit's LEDs.

<table>
<thead>
<tr>
<th>Name of LED</th>
<th>Colour</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>5VDC</td>
<td>Green</td>
<td>Internal voltage supply available</td>
</tr>
<tr>
<td>ERROR</td>
<td>Red</td>
<td>Failure of the DCU</td>
</tr>
<tr>
<td>STATUS INFO</td>
<td>Yellow</td>
<td>Not used</td>
</tr>
<tr>
<td>SAFETY RELAY OFF</td>
<td>Green</td>
<td>Used to verify the switch position of safety relay 1. The LED is illuminated when safety relay 1 is switched off</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pin</th>
<th>Signal</th>
<th>Description</th>
<th>State</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1.1</td>
<td>E1</td>
<td>Enable</td>
<td>&quot;1&quot; = enable</td>
</tr>
<tr>
<td>X1.2</td>
<td>E2</td>
<td>Spare</td>
<td></td>
</tr>
<tr>
<td>X1.3</td>
<td>E3</td>
<td>Speed signal</td>
<td>&quot;1&quot; = v &lt; 3 km/h</td>
</tr>
<tr>
<td>X1.4</td>
<td>E4</td>
<td>Limit switch door closed</td>
<td>&quot;1&quot; = door closed</td>
</tr>
<tr>
<td>X1.5</td>
<td>E5</td>
<td>&quot;Open&quot; push button</td>
<td>&quot;1&quot; = operated</td>
</tr>
<tr>
<td>X1.6</td>
<td>E6</td>
<td>Spare</td>
<td></td>
</tr>
<tr>
<td>X1.7</td>
<td>E7</td>
<td>K4 state</td>
<td>&quot;1&quot; = K4 active</td>
</tr>
<tr>
<td>X1.8</td>
<td>E8</td>
<td>A5 state</td>
<td>&quot;1&quot; = A5 active</td>
</tr>
<tr>
<td>X1.9</td>
<td>E9</td>
<td>Light barrier</td>
<td>&quot;0&quot; = interrupted</td>
</tr>
<tr>
<td>X1.10</td>
<td>E10</td>
<td>Spare</td>
<td></td>
</tr>
<tr>
<td>X1.11</td>
<td>E11</td>
<td>Door out of service limit switch</td>
<td>&quot;0&quot; = out of service</td>
</tr>
</tbody>
</table>

FM_Sec03 Rev: 0-May 2011
1.6. PARTS CATALOGUE (PC)

This document will contain a list of spare components and parts within the Tram design, with illustrated figures in 3D (where possible, 2D figures as a complement), in order to allow for an easy identification.

The contents of this document will include pictorial material identification diagrams including part numbers and quantities for the Tram (the level of detail covers the lowest replaceable unit from the vehicle i.e. all user replaceable parts).
1.7. INTERACTIVE ELECTRONIC TECHNICAL MANUAL

CAF and Geminys have developed during the recent years an enhanced way of arranging all the Operating and Maintenance Documentation, by means of a software tool that integrates all these manuals in a single PC tool.

The Interactive Electronic technical manual is arranged using XML standard, so that the documentation is able to be opened by means of any web browser. Moreover, this way of arrangement allows for the multiple links between manuals. In that sense, this electronic manual shows a linkage between the Maintenance Plan, the Maintenance and Repair Manual and a navigation tool through the figures and tables of the Parts Catalogue.

The advantages of this electronic manual are:

- Easy to be modified / updated
- Quick search engine
- Hiperlinks allow for fast jumps between contents of different manuals
- CAD viewer
Interactive help

Customization according to project specifics.

The Interactive Electronic technical manual, although it is not requested by the Tram Specification, is proposed as part of the Tram Documentation to be delivered by CAF for this project. Find below some snapshots in order to better understand the scope of this tool.

In the content of the manuals, there are links to illustrations, tables and chapters of other manuals.

The user can easily navigate through those links with a single click.
In the interactive manual there are two types of images:

- Bitmap images (simple photographs and figures)
- Vector images.

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The parts catalogue works differently. It allows to browse the table and the figures at the same time.

The window is divided into two sections: header and table of the parts.

The parts in italics are links that lead to parts that are disassembled into other parts.

Browsing the entire parts list now becomes an effortless task.
In addition, our manual allows browsing the figures using the viewer.
If one piece is disassembled into another, clicking on the identifying item provides direct access to the sub-figure of the part.
# Annexure O

**CONTRACTOR'S STAFFING PLAN**

## Schedule

<table>
<thead>
<tr>
<th>Annexure O - Human Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>5</td>
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<tr>
<td>6</td>
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<tr>
<td>7</td>
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<tr>
<td>8</td>
</tr>
<tr>
<td>9</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>11</td>
</tr>
<tr>
<td>12</td>
</tr>
</tbody>
</table>

| 13 | Workstation               |
| 14 | Wing Eco (Construction to Project) |
| 15 | 01 Protection, Development, and Innovation Department |
| 16 | 02 Export Service Department |
| 18 | 03 International Communication |
APPENDIX 8.2.2 – HUMAN RESOURCES

1. INTRODUCTION ...................................................................................................................... 2
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3. HUMAN RESOURCES .............................................................................................................. 4
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5. ON-SITE MANAGEMENT .......................................................................................................... 6
6. PERSONNEL’S FUNCTIONS AND QUALIFICATIONS ............................................................ 7
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   6.2. WORKSHOP MANAGER ................................................................................................... 7
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   10.2. EXTERNAL SERVICES DEPARTMENT ........................................................................... 19
   10.3. INTER-DEPARTMENTAL COMMUNICATION .................................................................. 19
1. **INTRODUCTION**

Details of the human resources to be employed in the delivery of the maintenance services are presented as follows.

CAF will provide details of the staffing levels proposed; assuming 6 LRVs will be supplied under the Supply Contract.
2. COMPETENT TEAM

CAF will ensure that all maintenance, overhaul, servicing and cleaning is carried out by a competent team. The team will comprise:

- CAF's Australia Maintenance organisation
- Engineering and maintenance support from CAF's headquarters in Spain

CAF employs a set of principles in determining the correct organisation structure for a particular project. These are regarded as critical to successful implementation of a project, and in other companies these principles are not always given sufficient priority. These principles are as follows:

- Customer-focused structure which considers reliability and availability targets
- Clear lines of communication and defined roles and responsibility both internally and with the customer.
- Accountability for all maintenance activities lies with the Chief Maintenance Engineer.
- Workshop structure led by experts in systems, with both technical and management expertise.
- Versatility with multi-skilled technician supported by system specialists
- Strong communication between the Design, Engineering and Maintenance teams, which fosters a good technical understanding of the vehicle and results in a beneficial effect on the maintenance.
3. **HUMAN RESOURCES**

CAF has calculated the required staffing levels for each maintenance activity based on our international experience, knowledge of the trains and Sydney requirements specified in the tender documents.

Shifts will be set up to provide maintenance services on site 7 days per week. The shift patterns will depend on the maintenance plan and the service availability requirements so that the majority of planned maintenance is performed in the off-peak hours. Technicians will also be made available to perform line side assistance to trains in service and assist with any recovery operations of failed trains. These assumptions have been included in the proposed staffing levels.

The shift coverage for the maintenance teams will be arranged and agreed with the client taking into consideration each of the following aspects:

- All planned maintenance activities in the depot
- The number of train movements required within the depot
- The fleet availability requirements
- Minimum team sizes
- Team skill diversity requirements
- Unplanned maintenance activities
- Line side technical support
- Provision of additional support on a call out basis
- Provision of additional engineering support from factory in Spain.
- Supplier specialist support as required

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4. ORGANISATION CHART

Next, the organization chart proposed by CAF for performing the maintenance activities is presented.
5. **ON SITE MANAGEMENT**

CAF, during the mobilization phase, will carry out the personnel selection process in the same way as for any other project where maintenance services are required.

CAF will manage the balance of Planned and Unplanned Maintenance, ensuring that neither an excess of resource and capacity will be engaged waiting for Unplanned Maintenance or that Unplanned Maintenance can not be performed due a shortage of resource and capacity.

In principle, the work will be scheduled according to the time passed or the kilometres travelled since the previous revision.

The preventive maintenance operations will be performed in accordance with the scopes in the Maintenance Plan (please refer to Schedule 8, Appendix 8.2.12 and Appendix 8.2.17). The time out of service envisaged for the operations will prevent train immobilization at undesired times.

Maintenance work will always be carried out considering the commercial service to be provided by the affected fleet of trains. To this end the majority of the maintenance work will be performed in off-peak hours.

As a reference, the maintenance team designed to be employed in the Sydney Tramway in the delivery of the services, assuming 6 LRV will be supplied (in addition to the 7 Variotrams) will be around:

<table>
<thead>
<tr>
<th>Role / Position</th>
<th>OPTION 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAF General Manager</td>
<td>1</td>
</tr>
<tr>
<td>(in CAF Spain)</td>
<td></td>
</tr>
<tr>
<td>Workshop General Manager</td>
<td>1</td>
</tr>
<tr>
<td>Workshop Manager</td>
<td>1</td>
</tr>
<tr>
<td>Senior Administrative</td>
<td>1</td>
</tr>
<tr>
<td>Store man</td>
<td>1</td>
</tr>
<tr>
<td>Supervisors</td>
<td>1</td>
</tr>
<tr>
<td>Technicians (average)</td>
<td>7</td>
</tr>
</tbody>
</table>
6. PERSONNEL'S FUNCTIONS AND QUALIFICATIONS

Following the positions description and the required qualifications for all positions are presented:

6.1. WORKSHOP GENERAL MANAGER (DEPOT MANAGER)

Functions:
- Deciding and control the targets, ensuring they are achieved.
- Accountable for rolling stock availability.
- Setting the Workshop general budget.
- Delivering train service provision requirements.
- Managing the materials, economic and human resources in the workshop.
- Managing the investments for maintenance.
- Agreeing training programs
- Motivating maintenance team including incentive and penalty schemes
- Implementing Quality and Environment Programs.
- Accountable for the management of spares.

Professional skills:
- Engineer or economist.
- Rolling stock maintenance knowledge, and relationship skills.
- Rolling stock maintenance experience.

6.2. WORKSHOP MANAGER

Functions:
- Delivering day to day availability
- Developing Maintenance Plans, including review and continuous improvements
- Recommending technical solutions
- Implementing improvements to the maintenance team including incentive schemes, training and competence management.
Supply and Maintenance of Light Rail Vehicles (LRVs) for Sydney Light Rail System

- Planning the maintenance operations schedule.
- Setting up the computer systems for maintenance, and managing their use.
- Requesting updates to technical documentation via CAF Rail Services.
- Responsible for materials supply and spares management.
- Leading fault investigation and repair work
- Producing monthly reports on reliability, availability, maintenance and safety issues.
- Implementing the Quality Assurance procedures.
- Implementing the Environmental Protection Plan procedures.
- Management of cleaning contracts.

Professional skills:
- Electrical, electronic and/or mechanical engineer.
- Technical knowledge on railways, maintenance and computers.
- Experience in rolling stock maintenance.

6.3. ADMINISTRATIVE STAFF/STOREMAN

Functions:
- Personnel managing.
- Logistics responsible.
- Facing suppliers.
- Controlling of investments.
- Responsible of factoring and financial or administrative matters.
- Supervising the computer system.

Professional skills:
- Economist or clerks.
- Experience with maintenance work control.

6.4. SUPERVISORS

Functions:

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• Managing and controlling the activity of the technicians in their groups.
• Planning and managing the day to day maintenance activities to ensure the Train Service Provision contract is met
• Communication between engineers and technicians.
• Ensuring Health and Safety of their team.

Professional skills:
• Industrial master.
• Railways technical knowledge.
• Rolling stock maintenance experience.
• Industrial organisation experience.

6.5. TECHNICIAN

Functions:
• Day to day preventative and corrective maintenance in line with the Maintenance Plan, quality requirements and safe working practices
• Recording the results of the inspections and operations.
• Suggesting improvements to training, maintenance or reliability.

Professional skills:
• Skilled technician.
• Railway technician knowledge.
7. CURRICULUM VITAE

The CV's for the key personnel proposed to occupy any supervisory position is presented:
<table>
<thead>
<tr>
<th>Role / Position</th>
<th>Name</th>
<th>Qualifications</th>
<th>Project</th>
<th>Role and Responsibility</th>
<th>From-To</th>
<th>Years of experience</th>
<th>Employment Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAF Rail Services General Manager</td>
<td>Ihigo Urretabizkaia</td>
<td>Bachelor Science in Industrial Engineering</td>
<td>LRV Pittsburgh</td>
<td>Quality Project Manager</td>
<td>2002-2006</td>
<td></td>
<td>CAF Rail Services General Manager</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Brussels Metro</td>
<td>Quality Project Manager</td>
<td>2002-2006</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>International Projects CAF</td>
<td>Maintenance and Warranty Service Deputy Manager, CAF</td>
<td>2006-2007</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>International Projects CAF</td>
<td>Maintenance and Warranty Service Manager, CAF</td>
<td>2007-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workshop General Manager</td>
<td>Dave Lowe</td>
<td>BSC Mechanical Engineering</td>
<td>Existing LUL rolling stock</td>
<td>London Underground Ltd Mechanical engineer in the technical office. Review and improve design of existing rolling stock to improve reliability and support maintenance activities</td>
<td>1989-1994</td>
<td>23</td>
<td>Workshop General Manager</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>CAF Systems engineer in support of Safety, Reliability and Maintenance studies for new rolling stock. Modifications manager for fleet as continuation</td>
<td>1994-1999</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>WMATA Systems design and integration engineer for propulsion, brakes and ATO</td>
<td>1999-2003</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Workshop Manager</td>
<td>David Taylor</td>
<td>BTEC- engineering (mechanical / manufacture), Institute of Motor Industry- associate</td>
<td>Landascar (Landrover, Suzuki) Madrid, Spain</td>
<td>CAF Beasain factory, Spain.</td>
<td>CAF, Mechanical engineer 1995-1997</td>
<td>19 years</td>
<td>Workshop Manager</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>---------------------------------------------</td>
<td>-----------------------------</td>
<td>-----------------------------------</td>
<td>--------</td>
<td>------------------</td>
</tr>
<tr>
<td>Sacramento LRV</td>
<td>CAF</td>
<td>Onsite testing, Modification and engineering support manager during the warranty period.</td>
<td>CAF Systems design and integration engineer for brakes system and EMC studies and testing.</td>
<td>2001-2003</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pittsburgh LRV</td>
<td>CAF</td>
<td>Systems design and integration engineer for propulsion and brakes systems</td>
<td>CAF Systems design and integration engineer for propulsion and brakes systems</td>
<td>2002-2003</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irish Rail DMUs</td>
<td>CAF</td>
<td>Modification and engineering support manager during the warranty period.</td>
<td>CAF Modification and engineering support manager during the warranty period.</td>
<td>2003-2004</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NIR DMUs</td>
<td>CAF</td>
<td>Warranty manager</td>
<td>CAF Warranty manager</td>
<td>2004-2005</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Irish Rail Intercity</td>
<td>CAF</td>
<td>Warranty manager</td>
<td>CAF Warranty manager</td>
<td>2005-2007</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stockholm, Edinburgh, Belgrade Tramways and New Zealand EMU's</td>
<td>CAF</td>
<td>Warranty manager</td>
<td>CAF Warranty manager</td>
<td>2007-</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Use or disclosure of the proposal data is subject to the restrictions noted on the title page of this proposal.
<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Education/Qualification</th>
<th>Experience/Role</th>
<th>Years</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senior Administrative</td>
<td>Kevin O'Hara</td>
<td>Higher National Diploma in Engineering</td>
<td>CAF LAR (Lantau airport line) AEL and LAL EMU's, Hong Kong. CAF, Warranty Engineer / modifications manager.</td>
<td>1997-2000</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CAF 2900 DMU's Drogheda, Ireland CAF, Warranty Engineer / modifications manager.</td>
<td>2003-2009</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CAF High Speed Train, Turkey CAF, Warranty Engineer / modifications manager.</td>
<td>2009-</td>
<td></td>
</tr>
<tr>
<td>Store man</td>
<td>Raymon Doyle</td>
<td>GCSE level</td>
<td>NIR Class 3000 and 4000 DMU Fleet Purchasing Manager, Responsible of Spares Management</td>
<td>2009-</td>
<td>3 years Senior Administrative</td>
</tr>
<tr>
<td>Supervisors and Technicians</td>
<td>To be defined</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8. WORKING SHIFT

CAF has calculated the required staffing levels for each maintenance activity based on his international experience, knowledge of the trains and the requirements specified in the tender documents.

The maintenance team designed to be employed in the delivery of the services, assuming 6 LRV and 7 Variotrams is presented in point 5 of this document.

Maintenance work will always be carried out considering the commercial service to be provided by the affected fleet of trains. To this end the majority of the maintenance work will be performed in off-peak hours.

- Off Peak period:
  - On any Business Day, the hours of 10:00 am to 3:30 pm and 7:30 pm to midnight
  - On any non Business Day, the hours of 5:30 am to midnight

- Peak Period:
  - On any Business Day, the hours of 5:30 am to 10 am and 3:30 pm to 7:30 pm

CAF will present the working shift roster demonstrating one complete shift cycle in later stage, once the final Operational Plan is defined.

At all times during the Term (24 hours a day, 7 days a week), CAF ensures that TfNSW and the Operator will have access to (including a telephone number) a Technician trained in the support of the Vehicles and Signalling Equipment and capable of assisting TfNSW and the Operator with:

- fault finding and troubleshooting assistance with the Vehicles and Signalling Equipment.
- co-ordination of support services upon the occurrence of a Failure of a Vehicle on the LRT.
9. **ESTIMATED HOURS**

A breakdown of CAF’s estimated personnel hours per Contract Year required to carry out the services is presented:
## Supply and Maintenance of Light Rail Vehicles (LRVs) for Sydney System

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>YEAR 1</th>
<th>YEAR 2</th>
<th>YEAR 3</th>
<th>YEAR 4</th>
<th>YEAR 5</th>
<th>YEAR 6</th>
<th>YEAR 7</th>
<th>YEAR 8</th>
<th>YEAR 9</th>
<th>YEAR 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheduled Maintenance of the Variotrams (under Maintenance Contract – Option 2)</td>
<td>1,013,63</td>
<td>3,600,05</td>
<td>3,131,43</td>
<td>3,131,43</td>
<td>4,552,93</td>
<td>3,131,43</td>
<td>3,131,43</td>
<td>2,365,95</td>
<td>3,131,43</td>
<td>3,131,43</td>
</tr>
<tr>
<td>Unscheduled Maintenance of the Variotrams (under Maintenance Contract – Option 2)</td>
<td>606,42</td>
<td>606,42</td>
<td>606,42</td>
<td>606,42</td>
<td>606,42</td>
<td>606,42</td>
<td>606,42</td>
<td>606,42</td>
<td>606,42</td>
<td>606,42</td>
</tr>
<tr>
<td>Scheduled Maintenance of the LRVs</td>
<td>0,00</td>
<td>4,391,39</td>
<td>4,391,39</td>
<td>4,391,39</td>
<td>5,953,66</td>
<td>4,391,39</td>
<td>4,391,39</td>
<td>11,193,58</td>
<td>4,391,39</td>
<td>4,391,39</td>
</tr>
<tr>
<td>Unscheduled Maintenance of the LRVs</td>
<td>957,74</td>
<td>957,74</td>
<td>957,74</td>
<td>957,74</td>
<td>957,74</td>
<td>957,74</td>
<td>957,74</td>
<td>957,74</td>
<td>957,74</td>
<td>957,74</td>
</tr>
</tbody>
</table>
10. CAF EXPERIENCE APPLICABLE TO THE PROJECT

CAF boasts a great deal of experience in the production and maintenance of metropolitan rail transport units (LRV’s, light articulated units, commuter train units, underground trains, etc.). This experience has been gained in extremely diverse countries and services.

The following sections indicate how CAF’s personnel for the EMU Supply Contract will be communicated with CAF's personnel for EMU Maintenance Contract to ensure the units approach to the designed maintainability.

In addition to the Production Resources, exclusively dedicated to the Project, other resources are planned to be used which are included in CAF’s company structure, which shall provide the necessary complements to execute the contracted operations.

10.1. RESEARCH, DEVELOPMENT AND INNOVATION DEPARTMENT

CAF has recently created the Rail Technological Centre, located in a new building built at the Beasain factory, which is home to more than 250 engineers and technicians who have either been recently incorporated or are from the departments that previously dealt with research, development and new technology.

This area will supply partial assistance to the team placed in the Employer's depot.

The purpose of this Centre, which is the largest of its kind in Spain, is to develop rail production, operation and maintenance technology in accordance with the latest advances and world standards, and to apply these advances to all actions carried out. This department is made up of the following areas:

- Research, Engineering, Design and New Developments.
- Train Maintenance.
- Maintenance Engineering.

The Engineering Department is essential in maintenance services to:

- Analyse RAMS parameters (reliability, availability, maintainability and safety);
- Provide technical support to solve problems and in making design modifications, when necessary.

These Departments includes the design experience of the Technical Departments and the maintenance experience of the Services Departments, in order to achieve a synergy which is of benefit for both stages of the rolling stock operating life. On the one hand, the design department receives first hand information relating to design criteria which improves material maintainability, reliability, availability and safety, whilst, on the other hand, the maintenance department receives more direct and interactive information to assess maintenance costs and to optimise maintenance
Supply and Maintenance of Light Rail Vehicles (LRVs) for Sydney Light Rail System

The Maintenance Engineering Department is made up of three teams which basically deal with the following tasks, respectively:

- Control of the information in the maintenance databases, analysis of this information and estimation of the Operation Life Cycle Cost (LCC) of the material.
- Design of the new Maintenance Plans and optimisation of existing plans during Maintenance activity.
- Research of new maintenance techniques and of maintenance techniques applied to newly developed equipment.

Rail Technological Centre, Beasain (Spain)
10.2. EXTERNAL SERVICES DEPARTMENT

CAF’s external services department executes and controls the activities they monitor during production and when the customer receives the material. The two main activities performed by this department are technical assistance for units under warranty and the provision of contracted maintenance services.

This department includes all direct and indirect labour exclusively dealing with the Maintenance Project, located at the maintenance centres. It also provides indirect centralised labour, partially dedicated to the Project, which belongs to the department’s structure. This structure serves as a link between the various maintenance projects and the various Company departments. To this end, it includes specialists who act as interlocutors with each of these departments: Financial-economic, purchases, human resources, quality, etc. making the most of the synergies of all maintenance activities.

10.3. INTER-DEPARTMENTAL COMMUNICATION

During the train maintenance period, the Project Manager and the Maintenance Engineering will detect any need to make improvements to the Maintenance Plan (MP) and/or Maintenance Criteria (MC). Said improvements are motivated by:

- Improvements to the initial MP
- Improvements to train maintainability
- Improvements to Reliability/Availability levels (incidents)
- Reduction of maintenance costs
- New train equipment projects

All improvements demanding Engineering, research studies and changes to documentation will require an engineering project.

Once all analyses have been carried out and any proposals for modifications have been formalised conceptually, Engineering Maintenance launches an Improvement Request (IR):

- Product IR: Once all analyses have been carried out and any proposals for modifications have been formalised conceptually, Engineering Maintenance launches an IR (Improvement Request). If the modification affects the product the corresponding box is checked and it passes on to claims Management.
- Maintenance Plan IR: If it concerns optimising the maintenance plan, a preliminary viability study is carried out.

The Maintenance Manager and Engineering Maintenance carry out a preliminary study before launching the improvement request (IR). The study consists of:

- Explanation of the improvement and the problem it solves.

Use or disclosure of the proposal data is subject to the restrictions noted on the title page of this proposal.
- Initial study of costs: reduction of maintenance hours, etc.
- Possible technical solution for said improvement.
- If concerning new train equipment, all contractual information is included.

On the basis of the above assessment, the Project Manager draws up the IR, including all the information generated at the above stage and files the IR in the CAF MAINTENANCE FORUM.

The indicators and target values of the project are defined annually by the Process Team (implementation of maintenance activities, monitoring and project closure) during the process review meeting.

The Project Managers complete the Scorecards every month and send them to both the Management of the subsidiary and Area Management in Beasain. The Quality Managers of the subsidiaries use the scorecard data to update the process indicators of their respective projects and report to the Quality Systems Area of the CAF, S.A. Maintenance Business Unit so that they can update the process indicator values at company level.

The contribution of Maintenance Engineering can be seen in the continuous improvement of the maintenance plans, using the most innovative techniques in the sector, as well as the ratings achieved, in the highest values for each application in question. Indeed, development of these engineering practices has been characterised by advances in proactive and predictive maintenance, in reliability centered maintenance, maintainability analysis, failure mode and effects analysis (FMEA) and in the development of interactive maintenance manuals.

Finally, the contribution of the centralised Purchasing management not only gives a precise understanding of materials and spares, but also of the most effective distribution channels for optimising the costs of activities in this field.