Partnering Contract: Variation Number 1 – Annexure 19 (Variation Forms)

Minor Contract Variation - GWRC to complete the form of notice below

Note: A Minor Contract Variation is defined at Schedule 1 to mean any Contract Variation which in GWRC's reasonable opinion will not require the Operator to incur Capital Expenditure in excess of (which amount shall not be Indexed) in aggregate over the remainder of the Term, but excludes:

- (a) the implementation of a Pre Priced Option following the Issue of an order given by GWRC pursuant to paragraph 4.1(
 Implementation of Pre Priced Options) of Schedule 16; and
- (b) any changes made to the Timetable or the Rail Unit Timetable in accordance with the Timetable Change Process, any changes made to the Rail Network Timetable and, in either case, any associated changes to the Working Timetable; and
- (c) any Special Event Services

	inor Contract Variation Notice y initiate – refer paragraph 5.2		
Contract Identifier	Annexure 19 (Variation Forms) Schedule 16 – (Change Events and Net Financial Impact)		
Category of Variation	Contract Management		
Contract Variation Number	GWRC: CNTR -7-614 Operator: PT0416 Variation 1		
Date of issue of Minor Contract Variation Notice	28 July 2016		
Details of the Minor Contract Variation	Annexure 19 (Variation Forms) – Revision 1 (attached to this Minor Contract Variation Notice) has been prepared to replace the forms set out in the current Annexure 19 (Variation Forms) - Final. The revised form for this Minor Contract Variation Notice and the Variation Order (set out at Part C of this document) has been prepared to record this first Contract Variation proposal and Variation Order		
Date by which the Minor Contract Variation must be implemented	From the date of the approved Variation Order Subject to issue of approved Variation Order by GWRC and GWRL (see Part C below)		
Methodology and process by which Operator must implement the Minor Contract Variation	Annexure 19 (Variation Forms) – Revision 1, a copy of which is attached is to be used (and adapted as required) to record this first Contract Variation and a future Contract Variation proposals and Variation Orders. The forms set out at Annexure 19 – Revision 1 must be used in conjunction with the provisions at Schedule 16 (Change Events and Net Financial Impact and the other relevant provisions in the Partnering Contract that provide for Contract Variations.		
Extent to which GWRC (acting reasonably) considers that the Operator will require relief from its obligations under the Partnering Contract as a result of the implementation of the Minor Contract Variation	Not applicable		
Any further information regarding the Minor Contract Variation as GWRC wishes to provide	Nil		
Any other particulars GWRC requires from the Operator in its Minor Contract Variation Quote (refer para 5.2.5 of Schedule 16)	Nil .		

Signature of GWRC Authorised Representative	(Signature) Name: Angus Gabara Position: GWRC Authorised Representative Date:
Minor Contract Variation Quote – to be completed by Operator (refer paragraph 5.3, Schedule 16)	
Estimate of Net Financial Impact arising from the proposed Minor Contract Variation, calculated in accordance with Part B of Schedule 16 (Change Events and Net Financial Impact) and with such estimate provided on an Open Book Basis and accompanied by all working papers and other documentation required to support the estimate (as required by paragraph 5.3 of Schedule 16)	Nil
Any other particulars specified by GWRC in the Minor Contract Variation Notice as being required	Nil
Signature of Operator Authorised Representative	
	Name: Position: Operator Authorised Representative Date: 30/11/45

Approved Variation Order - complete Part C below

	Part C m of approved Variation Order perator by GWRC and GWRL (if variation relates to assets owned by GWRL)	
This Variation Order relates to	A Minor Contract Variation (as set out in the Minor Contract Variation Notice above)	
Estimate of Net Financial Impact arising from the proposed Contract Variation	Nil	
Any change to the Service Fee or Payment Schedule Refer paragraph 6.26 Schedule 16	No change to Service Fee or Payment Schedule	
Time frame within which the proposed Contract Variation will be implemented	From and including the date of this approved Variation Order	
Any conditions attached to the Contract Variation	Nil	
Notice to proceed	GWRC by completing and Issuing this Variation Order to the Operator directs the Operator to implement this Contract Variation in the time frame set out above.	
Signatures of GWRC and GWRL Authorised Representatives	Name: Angus Gabara Position: GWRC Authorised Representative Date: 29/11/16 Name: Angus Gabara Position: GWRL Authorised Representative Date: 29/11/16	

Attachments (if any) refered to in this Contract Variation

Attachment I - Annexure 19 (Variation Forms) - Revision 1 (CNTR-7-603)

Partnering Contract: Variation Number [Insert Number] — [Insert name of Variation Proposal]

Minor Contact Variation - GWRC to complete the form of notice below

If the Variation is not a Minor Contract Variation the table below can be deleted

Note: A Minor Contract Variation is defined at Schedule 1 to mean any Contact Variation which in GWRC's reasonable opinion will not require the Operator to incur Capital Expenditure in excess of \$100,000 (which amount shall not be Indexed) in aggregate over the remainder of the Term, but excludes:

- (a) the implementation of a Pre Priced Option following the issue of an order given by GWRC pursuant to paragraph 4.1(
 Implementation of Pre Priced Options) of Schedule 16; and
- (b) any changes made to the Timetable or the Rail Unit Timetable in accordance with the Timetable Change Process, any changes made to the Rail Network Timetable and, in either case, any associated changes to the Working Timetable; and
- (c) any Special Event Services

The second secon	linor Contract Variation Notice y initiate – refer paragraph 5.2, Scheo	dule 16)	
Contract Identifier	[GWRC to insert reference to the parts of the Contract that the Minor Contract Variation applies to i.e. Schedule 4] (Vehicle Services – paragraphs xx to xx)]		
Category of Variation	[GWRC to insert a category description , for example Passenger Oper Services- [xx], Passenger Services Pls, Vehicle Services - Pla Maintenance, Passenger Services - Unplanned Maintenance Services - Modification Services		
Contract Variation Number	GWRC: [GWRC to add Ourspace file reference here]	Operator: [add the TDW file reference here – when Operator response is provided]	
Date of Issue of Minor Contract Variation Notice			
Details of the Minor Contract Variation			
Date by which the Minor Contract Variation must be implemented	Subject to issue of approved Variation below)	on Order by GWRC and GWRL(see Part C	
Methodology and process by which Operator must implement the Minor Contract Variation			
Extent to which GWRC (acting reasonably) considers that the Operator will require relief from its obligations under the Partnering Contract as a result of the implementation of the Minor Contract Variation			
Any further information regarding the Minor Contract Variation as GWRC wishes to provide			
Any other particulars GWRC requires from the Operator in its Minor Contract Variation Quote (refer para 5.2.5 of Schedule 16)			
Signature of GWRC Authorised Representative	M		
	(Si	gnature)	

	Name: Angus Gabara Position: GWRC Authorised Representative Date:	
Minor Contract Variation Quote – to be completed by Operator (refer paragraph 5.3, Schedule 16)		
Estimate of Net Financial Impact arising from the proposed Minor Contract Variation, calculated in accordance with Part B of Schedule 16 (Change Events and Net Financial Impact) and with such estimate provided on an Open Book Basis and accompanied by all working papers and other documentation required to support the estimate (as required by paragraph 5.3 of Schedule 16)	[Operator to complete within 3 Business Days of receipt of this Minor Contract Variation Notice]. [If there is no Net Financial Impact – insert Nil]	
Any other particulars specified by GWRC in the Minor Contract Variation Notice as being required	[Operator to complete within 3 Business Days of receipt of this Minor Contral Variation Notice].	
Signature of Operator Authorised Representative		
	(Signature) Name: Position: Operator Authorised Representative Date:	

A GWRC initiated Variation Proposal that is <u>not</u> a Minor Contract Variation – complete Part A and B below

[If the Variation is a Minor Contract Variation or an Operator initiated Contract Variation Parts A and B below can be deleted]

GWRC initiated Con	Part A tract Variation (refer paragraph 6, Schedule 16)		
Details of Variation Proposal			
Contract Identifier	[insert reference to the parts of the Contract that the Variation applies to Schedule 4] (Vehicle Services – paragraphs xx to xx)]		
Category of Variation	[Operator to insert a category description, for example Passenger Operatin Services- [xx], Passenger Services Pls, Vehicle Services - Planne Maintenance, Passenger Services - Unplanned Maintenance Services Vehicle Services - Modification Services]		
Contract Variation Number	GWRC: [GWRC to add Ourspace Operator: [Add the TDW file reference file reference here]		
Date of issue of Variation Proposal			
Proposed date on which the Contract Variation is to take effect	Subject to the issue of approved Variation Order by GWRC.		
Details of proposed Contract Variation	[insert details of proposal]		
Reason for change	[insert brief summary of the reasons for the variation being proposed]		
Details of any additional Passenger Services or Vehicle Services to be performed by Operator	[if there are no additional passenger or vehicle services to be performed by the Operator – insert "Nil"]		
Summary of the amendments required to the Transaction Documents (other than the Partnering Contract) to achieve the proposed Contract Variation (if any)			
Any further information relevant to the Variation Proposal – provided by GWRC or required to be provided by Operator as part of the Variation Response	[GWRC to insert any additional information relevant to the Variation Proposal and / or record any information that GWRC requires the Operator to provide as part of the Variation Response. If no additional information is required – insert "Nil"]		
Signature of GWRC Authorised Representative	(Signature) Name: Angus Gabara Position: GWRC Authorised Representative Date:		
	Part B ponse – refer paragraphs 6.4 to 6.8 Schedule 16) blete and add necessary detail as Attachments)		
Date of issue of Variation Response	[Operator to insert]		
Estimate of Net Financial Impact arising from the proposed Contract Variation, calculated in accordance with paragraph 6.6 (Variation Response) of Schedule 16 (Change Events and Net Financial Impact)	[Operator to insert. This will be an amount specified in actual values (i.e. real without indexation) as at the date of issue of this Variation Response. Note		

Time frame within which the proposed Contract	[If there is no Net Financial Impact – insert Nil] [Operator to insert. Note the requirement in paragraph 6.7 of Schedule 16 that this must be consistent with any timeframe proposed by GWRC at Section A of		
Full details of the methodology and process by which the Operator proposes to implement the proposed Contract Variation	[Operator to insert]		
Full details of the effect (if any) that the proposed Contract Variation will have on the Operator's ability to meet the requirements of, or achieve (as applicable) the Reliability KPI, Punctuality KPI, or PI Achieve Benchmarks, the Vehicle Services Objectives and Outcomes, the Passenger Services Objectives and Outcomes, the Vehicle Use in Service Outputs and Hand Back Standards	[Operator to insert] [If there is no effect – insert "Nil'] [If there is an effect and full details of the required response consists of more than a few sentences – respond by reference to an Attachment]		
Full details of effects (if any) that the proposed Contact Variation will have on Operators ability to perform its obligations in accordance with Transaction Documents	[Operator to insert] [If there is no effect – insert "Nil"] [If there is an effect and full details of the required response consists of more than a few sentences – respond by reference to an Attachment]		
Full details of effects (if any) that the proposed Contact Variation will have on the safe and lawful operation of passenger services on the Wellington Rail Network	If there is no effect insert "Nil"		
Full details of effects (if any) that the proposed Contact Variation will have on the condition, value or whole of life cost of any Vehicle, Spare, Rotable Item, Special Tool, General Tool or the EMU Depot Plant and Equipment	[Operator to insert]		
Full details of effects (if any) that the proposed Contact Variation will have on any GWRC System, GWRL System, or GWRC Asset or any other asset or system described at clause 12.1 (General) or on the safe and lawful use of the foregoing [Operator to insert] [If there is no effect – insert "Nil"] [If there is an effect and full details of the required response than a few sentences – respond by reference to an Attachment			
Full details of effects (if any) that the proposed Contact Variation will have on the GWRC's rail performance measurement system	[Operator to insert] [If there is no effect – insert "Nil"] [If there is an effect and full details of the required response consists of n than a few sentences – respond by reference to an Attachment]		
Full details of effects (if any) that the proposed Contact Variation will have on GWRC's customer complaint management system	[Operator to insert] [If there is no effect – insert "Nil'] [If there is an effect and full details of the required response consists of months than a few sentences – respond by reference to an Attachment]		
Full details of effects (if any) that the proposed	[Operator to insert]		

Contact Variation will have on any warranty or [If there is no effect - insert "Nil"] guarantee (including any claim thereunder) given by [If there is an effect and full details of the required response consists of more a supplier or manufacturer in relation to any Vehicle, GWRL System, GWRC Asset, GWRC System, Spare, than a few sentences - respond by reference to an Attachment] Rotable Item, Special Tool, General Tool, EMU Depot Plant and Equipment or any of the other assets or systems described at clause 12.1 (General) (to the extent that such warranty or guarantee have been provided to the Operator by any person) or on any other obligations or liabilities of such supplier or manufacturer (to the extent that the Operator has been made aware of the same) [Operator to insert] Full details of any relief sought from the Operator's obligations under the Partnering Contract to the [If there is no relief sought - insert "Nil'] extent reasonably required in order to implement the Contract Variation fif there is an effect and full details of the required response consists of more than a few sentences - respond by reference to an Attachment] [Operator to insert] Other information (if any) reasonably requested by GWRC at Section A of this Variation Proposal [If there is other information requested by GWRC - insert "Nil"] (If the other information consists of more than a few sentences - respond by reference to an Attachmentl Is implementation of the Contract Variation reasonably likely to require the Operator to incur [Operator to complete - Yes/ No] Capital Expenditure in excess of \$100,0007 If yes, the basis for that conclusion to be set out - by reference to an Attachment (if necessary)] [Operator to complete - yes /No] Does the Operator need to conduct a tender process in accordance with paragraph 17 of Schedule 16? (If no, the basis for that conclusion to be set out) Signature of Operator Authorised Representative (Signature) Name: Position: Operator Authorised Representative Date:

Operator initiated Contract Variation - Operator to complete the following form

[If the Variation is a Minor Contract Variation or a GWRC initiated Contract Variation this part of the form should be deleted]

Operator initiated Contact Variation (refer paragraph 8, Schedule 16) Details of Variation Proposal			
Contract Identifier	[insert reference to the parts of the Contract that the Variation applies i.e. Schedule 4] (Vehicle Services – paragraphs xx to xx)] [Operator to insert a category description, for example Passeng Operating Services- [xx], Passenger Services Pls, Vehicle Services Planned Maintenance, Passenger Services – Unplanned Maintenance Services, Vehicle Services – Modification Services]		
Category of Variation			
Contract Variation Number	GWRC: [GWRC to add Operator: [Add TDW file reference here]		
Date of issue of Variation Proposal			
Proposed date on which the Contract Variation is to take effect	Subject to the issue of approved Variation Order by GWRC.		
Details of proposed Contract Variation	[insert details of proposal]		
Reason for the proposed Contract Variation	[insert brief summary of the reasons for the variation being proposed]		
Operator's estimate of the Net Financial Impact arising from the proposed Contract Variation, calculated in accordance with Part B of Schedule 16 and on an Open Book Basis and supported by working papers and other documentation to support the estimate			
If the Net Financial Impact is negative, the proposed reduction in the Services Fee (refer paragraph 8.9.4, Schedule 16) Note - If the Net Financial Impact is negative paragraph 8.9.4 provides that the Service Fee shall be reduced by an amount equal to 50% of the amount (expressed as a positive figure) by which the Net Financial Impact is less than zero	4, 1.4 [If the Net Financial Impact is positive – insert 'not applicable – no char		
Timeframe within which the proposed Contract Variation will be implemented			
Methodology and process by which the Operator proposes to implement the proposed Contract Variation			
The effect (if any) that the proposed Contract Variation will have on the Operator's ability to meet the requirements of, or achieve (as applicable) the Reliability KPI, the Punctuality KPI or the PI Achieve Benchmarks, the Vehicle Service Objectives and Outcomes, the Passenger Services Objectives and Outcomes , the Vehicle Use in Service Outputs and the Hand back Standards.	[If there is no effect – insert "Nil"] [If there is an effect and full details of the required response consists more than a few sentences – respond by reference to an Attachment]		
Effect (if any) that the proposed Contract Variation will have on: (a) the Operator's ability to perform its obligations in accordance with the Transaction Documents (b) the safe and lawful operation of passenger services on the Wellington Network	[If there is no effect – insert "Nil"] [If there is an effect and full details of the required response consists of more than a few sentences – respond by reference to an Attachment]		
Effect (if any) that the proposed Contract Variation will have on: (c) the condition, value, or whole of life cost of any GWRL System, GWRL Asset, GWRC System, GWRC Asset or Maintained Asset or on the safe and lawful use of any of the	[If there is no effect – insert "Nil"] C [If there is an effect and full details of the required response consists T pero there is few conteness — respond by reference to an Attachment		

forgoing	
Effect (if any) that the proposed Contract Variation will have on: (d) any warranty or guarantee (including any claim thereunder) given by a supplier or manufacturer in relation to any GWRL System, GWRL Asset, GWRC System, GWRC Asset or Maintained Asset or any other assets or systems described at clause 12.1 (to the extent that the terms of the warranty or guarantee have been provided to the Operator) or on any other obligations or liabilities of such supplier or manufacturer (to the extent that the Operator has been made aware of the same)	[If there is no effect – insert "Nil"] [If there is an effect and full details of the required response consists of more than a few sentences – respond by reference to an Attachment]
Operator Approved Modification Services If the Contract Variation includes any enhancement or modification to the EMUs or Carriages specify: - whether carrying out of such enhancement or modification will give rise (or is likely to give rise) the unavailability of any Vehicle which in turn would entitle the Operator to claim an Excusing Event; and - the Operator's reasonable estimate of the likely period of unavailability (if any) of the affected Vehicles (refer para 5.3 Schedule 4)	[If no Approved Modification Services are proposed insert "Nil"] [If Approved Modification Services are proposed - respond by reference to an Attachment if the response consists of more than a few sentences]
Changes to Vehicle maintenance, EMU Depot Plant and Equipment Manual or Electric Shunt Manual If the Contract Variation includes any change to the Matangi Fleet Maintenance Plan, the Carriage Fleet Maintenance Plan, the EMU Depot and Equipment Manual or the Electric Shunt Manual (including any proposed change to a requirement contained therein or any change to any Spares, Rotable Items, Special Tools, General Tools or EMU Depot Plant and Equipment referred to in such documents) include: - full details about the proposed change, including drafting changes - an explanation as to the reasons for the proposed change will achieve the same or a better result in relation to the maintenance of the Vehicles or the EMU Depot Plant and Equipment - a signed statement from the Operator (in accordance with the requirements a paragraph 17.2.3 of Schedule 4) - be accompanied by any consultant's reports or internal reports prepared in relation to the proposed change - be accompanied by written confirmation from the relevant supplier or manufacturer (as required by paragraph 17.2.5 Schedule 4)	[If no change to Vehicle maintenance plans, EMU Depot Plant and Equipment Manual or Electric Shunt] [If changes are included – respond by setting out full details of the proposed change and setting out the required accompanying material as Attachments]
The value for money for GWRC arising from the proposed Contract Variation Any additional information requested by GWRC in	[Respond by reference to an Attachment (if necessary)]
connection with the proposed Contract Variation Signature of Operator Authorised Representative	
	(Signature) Name: Position: Operator Authorised Representative Date:

Approved Variation Order - complete Part C below

	Part C m of approved Variation Order perator by GWRC and GWRL (if variation relates to assets owned by GWRL)		
This Variation Order relates to	[Delete the options below that do not apply] A Minor Contact Variation (as set out in the Minor Contract Variation Notice above) [or] A GWRC initiated Contract Variation (as set out at Part A and Part B above) [or]		
Estimate of Net Financial Impact arising from the proposed Contract Variation	An Operator initiated Contract Variation (as set out in the above table) [GWRC to insert the amount calculated in accordance with Schedule 16. This will be an amount specified in actual values (i.e. real without indexation) as at the date of issue of this Variation Response.] [If there is no Net Financial Impact – insert "No change to Service Fee or Payment Schedule"] [GWRC to insert the amount of any payment due to the Operator or any decrease in the Service Fee, by reference to the provisions at paragraph 6.26, Schedule 16] [If there is no payment due or change to the Service Fee – insert Nil] [GWRC to insert. Note the requirement in paragraph 6.7 of Schedule 16 that this must be consistent with any timeframe proposed by GWRC at Section A or		
Any change to the Service Fee or Payment Schedule Refer paragraph 6.26 Schedule 16 Time frame within which the proposed Contract			
Variation will be implemented Any conditions attached to the Contract Variation	this Variation Proposal] [GWRC to insert]		
Notice to proceed	[If there are no conditions – insert Nil] GWRC by completing and issuing this Variation Order to the Operator direct the Operator to implement this Contract Variation in the time frame set of above.		
Signatures of GWRC and GWRL Authorised Representatives	(Signature) Name: Angus Gabara Position: GWRC Authorised Representative Date: (Signature) Name: Angus Gabara		
	Position: GWRL Authorised Representative Date:		

Summary of Attachments (if any) referred to in this Contract Variation:

Attachment 1 - [insert details i.e. Schedule / Annexure [xx] (xxxxx) - [Revision 1]

Partnering Contract: Variation Number 2 – Reporting and determining performance against Reliability and Punctuality KPIs

Minor Contact Variation - GWRC to complete the form of notice below

Note: A Minor Contract Variation is defined at Schedule 1 to mean any Contact Variation which in GWRC's reasonable opinion will not require the Operator to incur Capital Expenditure in excess of which amount shall not be Indexed) in aggregate over the remainder of the Term, but excludes:

- (a) the implementation of a Pre Priced Option following the issue of an order given by GWRC pursuant to paragraph 4.1(
 Implementation of Pre Priced Options) of Schedule 16; and
- (b) any changes made to the Timetable or the Rail Unit Timetable in accordance with the Timetable Change Process, any changes made to the Rail Network Timetable and, in either case, any associated changes to the Working Timetable; and
- (c) any Special Event Services

	Minor Contract Varia nay initiate – refer par		
Contract Identifier	Reporting and determining performance against Reliability and Punctul KPIs Schedule 5 (Planning, Reporting and Meetings) Schedule 6 (Financial and Performance Regime)		
Category of Variation	Contract Management		
Contract Variation Number	GWRC: CNTR -7-	623	Operator: PT0416 Variation 3
Date of issue of Minor Contract Variation Notice	6 October 2017		
Details of the Minor Contract Variation	Minor Contract Va	agraph 3. must include ne Punctul as to failure	orting and Meetings) — Revision 1 (attached to this tice) records the following changes: 1.7 (aA) to require that the Weekly Operational de in respect of each failure to meet the Reliability ality KPI: the cause of such failure and details of those es that the Operator considers should be flagged of the investigation between the Access Provider the Operator;
	(ii)	where the Operator considered a failure to be directly attributable to an Excusing Event:	
		(A)	the reasons why it considers that to be the case; and
		(B)	details as to how it is complying with paragraphs 14.1.2 and 14.1.3 (Excusing Events and Deemed Performance) of Schedule 6 (Financial and Performance Regime) in respect of such failure;

	and		
	(ii) the outcome of any further investigations flagged in the previous Weekly Operational Report and details of the reasons for any change to the initial attribution of such failures from the attribution set out in the previous Weekly Operational Report;		
	 new paragraph 3.1.8 (b) (iA) to require that the Monthly Operational Report must include in respect of each failure to meet the Reliability KPI or the Punctuality KPI during the Relevant Month: 		
	(a) an update in respect of matters specified in paragraph 3.1.7 (aA) and details of those failures in respect of which, notwithstanding any further investigation between the Access Provider and the Operator, attribution has not been resolved and GWRC's non-binding determination of attribution is requested to enable the Performance Deductions to be calculated in accordance with paragraph 6 of Schedule 6;		
	(b) the outcome of any non-binding determinations by GWRC of attributions referred to in paragraph 3.1.8 (b) (iA) as flagged in the previous Monthly Operational Report and any other changes to the Operator's proposed attributions following discussions with GWRC; and		
	(c) an update (in regard to the last Relevant Month in the Term) in respect of any remaining outstanding attributions to enable the Final Month Deductions to be determined in accordance with the time frames set out at paragraph 1.3 of Schedule 6.		
	Schedule 6 (Financial and Performance Regime) – Revision 1 records the following: • changes to the formula for calculating the Services Fee at paragraphs1.2 and 1.2.8 to reflect that the aggregate of all Performance Deductions incurred in respect of Scheduled Services will be calculated by reference to the Relevant Month immediately preceding the Relevant Month • addition of a new paragraph 1.3 to record the basis upon which GWRC shall be entitled to withhold payment of the Services Fee in respect to the last Relevant Month of the Term.		
Date by which the Minor Contract Variation must be implemented	Revision 1 of Schedules 5 and 6 shall apply from 1 October 2017		
Methodology and process by which Operator must implement the Minor Contract Variation	Subject to issue of approved Variation Order by GWRC and GWRL (see Part C below) Schedule 5 (Planning, Reporting and Meetings) – Revision 1, a copy of which is attached replaces Schedule 5 (Planning, Reporting and Meetings) – Final Schedule 6 (Financial Performance Regime) – Revision 1, a copy of which is attached replaces Schedule 6 (Financial Performance Regime) – Final		
Extent to which GWRC (acting reasonably) considers that the Operator will require relief from its obligations under the Partnering Contract as a result of the implementation of the Minor Contract Variation	Not applicable		

Any further information regarding the Minor Contract Variation as GWRC wishes to provide	Nil
Any other particulars GWRC requires from the Operator in its Minor Contract Variation Quote (refer para 5.2.5 of Schedule 16)	Nil
Signature of GWRC Authorised Representative	Name: Angus Gabara Position: GWRC Authorised Representative Date: 3 Nav 2017
Minor Contract Variation Quote – to be completed by Operator (refer paragraph 5.3, Schedule 16)	
Estimate of Net Financial Impact arising from the proposed Minor Contract Variation, calculated in accordance with Part B of Schedule 16 (Change Events and Net Financial Impact) and with such estimate provided on an Open Book Basis and accompanied by all working papers and other documentation required to support the estimate (as required by paragraph 5.3 of Schedule 16)	Nil
Any other particulars specified by GWRC in the Minor Contract Variation Notice as being required	Nit
Signature of Operator Authorised Representative	Name:
	Position: Operator Authorised Representative Date: 13/11/2017

Approved Variation Order - complete Part C below

PT0416

	Part C m of approved Variation Order perator by GWRC and GWRL (if variation relates to assets owned by GWRL)
This Variation Order relates to	A Minor Contact Variation (as set out in the Minor Contract Variation Notice above)
Estimate of Net Financial Impact arising from the proposed Contract Variation	Nil
Any change to the Service Fee or Payment Schedule Refer paragraph 6.26 Schedule 16	No change to Service Fee or Payment Schedule
Time frame within which the proposed Contract Variation will be implemented	From and including the date of this approved Variation Order
Any conditions attached to the Contract Variation	Nil
Notice to proceed	GWRC by completing and issuing this Variation Order to the Operator direct the Operator to implement this Contract Variation in the time frame set ou above.
Signatures of GWRC and GWRL Authorised Representatives	Name: Angus Gabara Position: GWRC Authorised Representative Date: 3 Nov 2017 (Signature) Name: Angus Gabara Position: GWRL Authorised Representative Date: 3 Nov 2017

Attachments (if any) referred to in this Contract Variation

Attachment 1 - Schedule 5 (Planning, Reporting and Meetings) - Revision 1 (CNTR-7-621)

Attachment 2 - Schedule 6 (Financial and Performance Regime) - Revision 1 (CNTR - 7-622)

Partnering Contract: Variation Number 3 – Schedule 7 (Operator Insurance requirement)

Minor Contact Variation - GWRC to complete the form of notice below

Note: A Minor Contract Variation is defined at Schedule 1 to mean any Contact Variation which in GWRC's reasonable opinion will not require the Operator to incur Capital Expenditure in excess (which amount shall not be Indexed) in aggregate over the remainder of the Term, but excludes:

- (a) the implementation of a Pre Priced Option following the issue of an order given by GWRC pursuant to paragraph 4.1(Implementation of Pre Priced Options) of Schedule 16; and
- (b) any changes made to the Timetable or the Rail Unit Timetable in accordance with the Timetable Change Process, any changes made to the Rail Network Timetable and, in either case, any associated changes to the Working Timetable; and
- (c) any Special Event Services

(On	Minor Cont		ion Notice agraph 5.2, Schedule 16)
Contract Identifier	Schedule 7 (Opera		
Category of Variation	Contract Managen	nent	
Contract Variation Number	GWRC: CNTR -7-	624	Operator: PT0416 Variation 3
Date of issue of Minor Contract Variation Notice	28 July 2016	1	
Details of the Minor Contract Variation	Contract Variation Damage Policy se the addit amendin the purp will be so the desc part of th the delet the follow Decla as at the Contra) records to tout at section of the \text{\text{\text{out} at section of the \text{\text{\text{ose} of the eparately librated of the deductibility of the common of the common of the deduction of the ded	Ince requirement) — Revision 1 (attached to this Minor the following changes to requirements for the Material tion 2: //ehicle Services Subcontractor as one of the Insured property to make it clear that for Material Damage Policy the Simulator (when provided sted in the definition of "Insured Property" and amending Maximum Policy Deductibles to refer to the Simulator as the applicable to the EMU Depot Plant and Equipment apital additions sublimit es to the Declared Values and Limits of Liability Vehicles (as per the attached underwriting schedules) Spares, Rotable Items, Special Tools and General Tools EMU Depot Demu Depot Plant and Equipment Vehicles, Spares, Rotable Items, Special Tools and General Vehicles
		the date of Partnering	Tools Except in relation to fire each and every loss or series of losses arising out of any one event in excess of policy deductibles , and
			For fire - each and every loss or series of losses arising out of any one event in excess of the deductibles and in

	the aggregate in any one annual period of insurance.
	EMU Depot
	each and every loss or series of losses arising out of any one event in excess of policy deductibles
	EMU Depot Plant and Equipment
	each and every loss or series of losses arising out of any one event in excess of policy deductibles
Date by which the Minor Contract Variation must be implemented	From the Commencement Date Subject to Issue of approved Variation Order by GWRC and GWRL (see Part C below)
Methodology and process by which Operator must implement the Minor Contract Variation	Schedule 7 (Operator Insurance requirement) – Revision 1, a copy of which is attached replaces Schedule 7 (Operator Insurance requirement) – Final.
Extent to which GWRC (acting reasonably) considers that the Operator will require relief from its obligations under the Partnering Contract as a result of the implementation of the Minor Contract Variation	Not applicable
Any further information regarding the Minor Contract Variation as GWRC wishes to provide	Nil
Any other particulars GWRC requires from the Operator in its Minor Contract Variation Quote (refer para 5.2.5 of Schedule 16)	Nil
Signature of GWRC Authorised Representative	Name: Angus Gabara Position: GWRC Authorised Representative Date: 29/11/16
Minor Contract Variation Quote – to be completed by Operator (refer paragraph 5.3, Schedule 16)	
Estimate of Net Financial Impact arising from the proposed Minor Contract Variation, calculated in accordance with Part B of Schedule 16 (Change Events and Net Financial Impact) and with such estimate provided on an Open Book Basis and accompanied by all working papers and other documentation required to support the estimate (as required by paragraph 5.3 of Schedule 16)	Nil
Any other particulars specified by GWRC in the Minor Contract Variation Notice as being required	Nil

Approved Variation Order - complete Part C below

	Part C m of approved Variation Order perator by GWRC and GWRL (if variation relates to assets owned by GWRL)
This Variation Order relates to	A Minor Contact Variation (as set out in the Minor Contract Variation Notice above)
Estimate of Net Financial Impact arising from the proposed Contract Variation	Nil
Any change to the Service Fee or Payment Schedule Refer paragraph 6.26 Schedule 16	No change to Service Fee or Payment Schedule
Time frame within which the proposed Contract Variation will be implemented	From and including the date of this approved Variation Order
Any conditions attached to the Contract Variation	Nil
Notice to proceed	GWRC by completing and issuing this Variation Order to the Operator directs the Operator to implement this Contract Variation in the time frame set out above.
Signatures of GWRC and GWRL Authorised Representatives	Name: Angus Gabara Position: GWRC Authorised Representative Date: 29/11/16 Name: Angus Gabara Position: GWRL Authorised Representative Date: 29/11/16

Attachments (if any) referred to in this Contract Variation

Attachment 1 - Schedule 7 (Operator Insurance requirement) - Revision 1 (CNTR-7-625)

PT0416

Schedule 7

Operator Insurance requirement

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1 Introduction

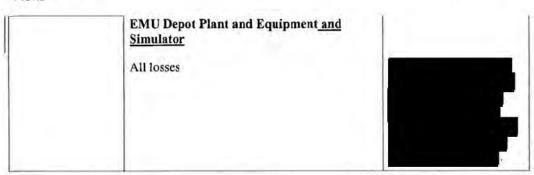
- 1.1 This Schedule sets out details of the following insurance policies that the Operator is required to take out and maintain, being:
 - 1.1.1 the Material Damage Policy; and
 - 1.1.2 the Public Liability Policy.
- 1.2 The Operator shall take out and maintain the Material Damage Policy and the Public Liability Policy in accordance with the key terms described at paragraphs 2 and 3 of this Schedule and the provisions at clause 50 (*Insurance*).
- 1.3 All references to dollars and \$ are to New Zealand currency.
- 1.4 The Parties acknowledge and agree that the terms of the Public Liability Policy and Material Damage Policy (including declared values and limits of liability provided for in paragraph 2) may be adjusted in accordance with the provisions of the Partnering Contract relating to Contract Variations.

2 Material Damage Policy

The Insured:	Operator; Vehicle Services Subcontractor;
	Greater Wellington Regional Council (GWRC); and
	Greater Wellington Rail Limited (GWRL),
	for their respective rights, obligations and interests.
The Business:	Operation and maintenance of rolling stock and all other activities incidental thereto or permitted under the terms of the Partnering Contact or any Transaction Document.
The Situation:	Primarily in Wellington but including anywhere in New Zealand.
Period of Insurance:	From and including 3.00 am on the Commencement Date. To and including 2.00 am on the date of termination or expiry of the
	Partnering Contract (whichever is the earlier), subject to the renewal of this insurance cover on an annual basis.
Insured Property:	The Vehicles (excluding the Simulator) described in the Partnering Contract (and the attached underwriting schedule) and any other rolling stock or vehicles which may from time to time be provided to the Operator by GWRC or GWRL under the Partnering Contract.
	The EMU Depot and the EMU Depot Plant and Equipment and any other plant and equipment which may from time to time be provided to the

	Operator by GWRC or GWRL under the Partnering Contract.
	The Simulator (when provided), which for the purpose of the Material Damage Policy will be separately listed in the definition of "Insured Property" shall be insured as part of the EMU Depot Plant and Equipment.
	The Spares, Rotable Items, Special Tools and General Tools (located at EMU Depot, the Carriage Depot and at Lower Hutt) transferred to the Operator on the Commencement Date (as part of the Initial Transferring Assets) and any replacement or addition from time to time thereof which may be transferred or provided to the Operator by GWRC or GWRL under the Partnering Contract.
Declared Values as at the date of the Partnering Contract:	Vehicles (as per the attached underwriting schedules) Spares, Rotable Items, Special Tools and General Tools
	EMU Depot EMU Depot Plant and Equipment
Coverage:	Comprehensive first party property damage cover in respect of the Insured
	Vehicles, Spares, Rotable Items, Special Tools and General Tools
Sub-Limits as at the date of the	Burglary/theft Money

Partnering Contract: (apply in excess of policy deductibles)	Artworks and curios Loss of land value Removal of debris (Vehicles) Personal property of directors and employees Unspecified customers' goods Contract works other than contracts more specifically insured (excluding advanced consequential loss) Capital additions Property in transit	
	Reward paid by the Insured to protect or recover Insured Property Expediting expenses Rolling stock collision	
Maximum Policy Deductibles:	Vehicles Natural Disaster claims Rolling stock in motion (EMUs) Rolling stock in motion (Carriages) All other losses Spares, Rotable Items, Special Tools and General Tools All losses EMU Depot	



Key terms for Material Damage Policy

2.1 The Material Damage Policy shall contain the following terms, or terms to the same effect.

Interests of other parties

- 2.2 This policy extends to indemnify each insured party and any other party having a pecuniary or economic interest in the Insured Property.
- 2.3 Where the insured consists of more than one legal entity that is named on the schedule:
 - 2.3.1 each shall be considered as a separate entity and the word "insured" shall apply to each as if a separate policy had been issued to each. Nothing contained in this condition shall result in an increase of the insurer's liability in respect of any occurrence or period of insurance;
 - 2.3.2 any act, error, omission, neglect or breach of this policy of or by an individual party will not prejudice the rights of the remaining party/parties; and
 - 2.3.3 the insurer shall not impute to any insured any knowledge or intention or state of mind possessed or allegedly possessed by any other insured.

Subrogation waiver

- 2.4 The insurers irrevocably and unconditionally agree to waive any rights and remedies or relief to which they may become entitled by subrogation against:
 - 2.4.1 any insured named or described by this policy (including its directors, partners, officers, employees or servants);
 - 2.4.2 any corporation or organisation (including its directors, officers, partners, employees or servants) owned or controlled by any insured named herein or subsidiary to any insured named herein or any co-owner of the Insured Property;
 - 2.4.3 any party referred to in memoranda entitled 'Interests of other parties' (or as amended), (and the insurer agrees that any agreement(s) that the

insured may have between any or all such parties will not affect the validity of this endorsement); and

2.4.4 any railroad, other transportation corporation or company, local authority or Government or Government agency or other statutory authority, lessor, property owner, contractor or person whenever the insured has agreed to release such party from liability arising from any peril insured under this policy.

Testing and commissioning

2.5 This policy extends to cover Insured Property during the course of, and as a result of its use following, processing and/or testing and commissioning.

Other terms

- 2.6 The policy shall:
 - 2.6.1 be governed by New Zealand law and subject to New Zealand jurisdiction;
 - 2.6.2 require the insurer to promptly notify each insured party:
 - (a) if the premium is unpaid by the date it is due, and giving each insured party 20 Business Days to pay the amount outstanding;
 - (b) if the insurer considers any party is in breach of the policy; and
 - (c) if the insurer proposes to make any payment under the policies,
 5 Business Days prior to the insurer making any such payment;
 and
 - 2.6.3 require the insurer to:
 - (a) pay all amounts payable under the policy into the Joint Insurance Account;
 - (b) provide GWRC and GWRL not less than 20 Business Days prior written notice of the cancellation, expiry, termination or amendment of the policy; and
 - (c) not contain any average clause.

UNDERWRITING SCHEDULES FOR MATERIAL DAMAGE POLICY

VALUES FOR INSURANCE PURPOSES 30 JUNE 2016 - 30 JUNE 2017

Matangi Fleet EMU value

Vehicle Type No.	Vehicle Serial No.	Vehicle Type Description	Estimated Matangi Fleet value
EMU		83 2 car sets	

Partnering	Contract
PT0416	

CONFIDENTIAL

Schedule 7

2000		
Total		

Carriage Fleet - SE Carriage value

Vehicle Type No.	Vehicle Serial No.	Vehicle Type Description	Estimated SE Carriage value
SE1	SE3380	Standard passenger coach	
SE2	SE3311	Standard passenger coach	
SE3	SE3324	Standard passenger coach	
SE4	SE3288	Standard passenger coach	
SES1	SES3327	Passenger coach with wheelchair hoist	
SEG1	SEG3430	Passenger coach with generator	
		Total	

Carriage Fleet - SW Carriage value

Vehicle Type No.	Vehicle Serial No.	Vehicle Type Description	Estimated SW Carriage value
SW1	SW5837	Standard passenger coach	
SWS1	SWS5660	Passenger coach with wheelchair hoist	
SWG1	SWG3365	Passenger coach with generator	
SW2	SW5820	Standard passenger coach	
SW3	SW3376	Standard passenger coach	
SW4	SW3339	Standard passenger coach	
SW5	SW3394	Standard passenger coach	
SWS2	SWS5723	VI	
SWG2	SWG5671	Passenger coach with generator	
SW6	SW5658	Standard passenger coach	
SW7	SW5646	Standard passenger coach	
SW8	SW3294	Standard passenger coach	
SWS3	SWS3298	Passenger coach with wheelchair hoist	
SWG3	SWG3422	Passenger coach with generator	
SW9	SW3355	Standard passenger coach	
SW10	SW3349	Standard passenger coach	

SW11	SW3404	Standard passenger coach	
SW12	SW3282	Standard passenger coach	
AG Van	AG222	Spare Generator and luggage Van	
		Total	

3 Public Liability Policy

The Insured:	Operator		
The Business:	Operation and maintenance of rolling stock and all other activities incidental thereto or permitted under the terms of the Partnering Contact or any Transaction Document.		
Period of Insurance	From and including 3.00 am on the Commencement Date To and including 2.00 am on the date of termination or expiry of the Partnering Contract (whichever is the earlier), subject to the renewal of this insurance cover on an annual basis.		
Minimum Limit of Liability: (to apply in excess of any relevant policy deductible)	any one occurrence.		
Maximum policy deductible:	any one occurrence.		
Required policy extensions:	Forest & Rural Fires Act liability Exemplary & Punitive Damages		
Territorial Limits:	Worldwide.		
Policy to include:	Extension in respect of the vicarious liability of GWRC/GWRL arising out of the performance of the Operator		

Key terms for Public Liability Policy

3.1 The Public Liability Policy shall contain the following terms, or terms to the same effect.

PT0416

Contractual agreement

3.2 The insurer agrees that the Operator's entry into the Partnering Contract or any of the Transaction Documents does not breach any policy exclusion for liability assumed by agreement.

Other terms

3.3 The Operator shall or shall procure that its insurance broker shall provide GWRC and GWRL not less than 20 Business Days prior written notice of the cancellation, expiry, termination or amendment of the policy.

Partnering Contract: Variation Number 5 – Operator cleaning obligations at Wellington Station and increase to Service Fee

Contract Variation - GWRC to complete the form of notice below

Note: A Contract Variation is defined at Schedule 1 to mean any Contract Variation which in GWRC's reasonable opinion will not require the Operator to incur Capital Expenditure in excess of \$ (which amount shall not be Indexed) in aggregate over the remainder of the Term, but excludes:

- (a) the implementation of a Pre Priced Option following the issue of an order given by GWRC pursuant to paragraph 4.1(
 Implementation of Pre Priced Options) of Schedule 16; and
- (b) any changes made to the Timetable or the Rail Unit Timetable in accordance with the Timetable Change Process, any changes made to the Rail Network Timetable and, in either case, any associated changes to the Working Timetable; and
- (c) any Special Event Services

	Contract Vari (Only GWRC may initiate – refe		
Contract Identifier	Operator cleaning obligations at Wellington Station - amendments to Schedule 9 (Stations and D Facilities) and to Schedule 6 (Financial and Performance Regime) and Schedule 1 (Definitions interpretation) to include the "Wellington Station Operator Area Cleaning Fee" as part of the Services F		
Category of Variation	Contract Management		
Contract Variation Number	GWRC: CNTR -7-810	Operator: PT0416 Variation 5	
Date of issue of Contract Variation Notice	17 January 2017		
Details of the Contract Variation	Paragraph 3.4 of Schedule 9 (Stations and Depot Facilities) states that the Operator shall be responsible for arranging, overseeing and meeting the cost of cleaning those parts of the Wellington Station Access Areas described in the table at paragraph 7.1 where the Operator is shown as the party responsible, to the relevant corresponding standard indicated in that table. The table at paragraph 7.1 provides that with the exception of the IFT devices, KiwiRail as lessor of the Wellington Station lease is the party responsible for cleaning "Common Areas (including platforms)" and the "Metro" areas shown shaded brown on the Wellington Station Plan attached at Appendix 1 of Schedule 9. At the Commencement Date certain aspects of the proposed Wellington Station Lease were still to be agreed with KiwiRail including (amongst other things) obligations for cleaning common areas and "metro areas to be made available to the Operator under the terms of the Wellington Station Lease. Following negotiation of the Wellington Station Lease (now close to being finalised between GWRC (at lessee) and KiwiRail (as lessor), it has been agreed by GWRC and the Operator that: 1. KiwiRail as lessor of the Wellington Station Lease shall (in accordance with the Wellington Station Lease) be responsible for cleaning the following areas: - the Common Areas (as described in the Wellington Station Lease but excluding, for the		
	(as shown on the plan to be attack	d	
	 the Operator shall (at the request of subcontractor 'Clean as a Whistle' to 	and with the prior written approval of GWRC) procure It's cleaning clean areas A, E and F;	

Extent to which GWRC (acting reasonably) considers that the Operator will require relief from its obligations under the Partnering Contract as a result of the implementation of the Contract Variation	Not applicable
Methodology and process by which Operator must implement the Contract Variation	As set out in the attachment to this Contract Variation Notice
Date by which the Contract Variation must be implemented	With effect from 1 January 2017 (not back dated to the Commencement Date). Subject to issue of approved Variation Order by GWRC and GWRL (see Part C below)
	 the amount of excluding GST) being "Wellington Station Operator Area Cleaning Fee" shall be NFI Indexed in accordance with the provisions at paragraphs 12.6 and 12.7 of Schedule 16 (Change Events and Net Financial Impact);
	 the increase to the Services Fee, by the addition of the Wellington Station Operator Area Cleaning Fee shall not be subject to any further variation if the Operator's cleaning subcontractor increases it's fee or the basis upon which costs are recovered or if the cleaning contractor is replaced during the Term of the Partnering Contact;
	The attachment to this Contract Variation Notice sets out the amendments to be made to the Partnering Contract to give effect to these changes as set out above. For the avoidance of doubt it is noted that:
	Schedule 1 (Definitions and interpretation) shall be amended (as set out in this Variation Order) to add the definition of "Wellington Station Operator Area Cleaning Fee". The attachment to this Contract Variation Notice sets out the amendments to be made to the Perturbation.
	 Schedule 9 (Stations and Depot Facilities) shall be amended (as set out in this Variation Order) to record the relevant changes to the table at paragraph 7.1 recording the parties cleaning obligations at Wellington Station; and
	 Schedule 6 (Financial and Performance Regime) shall be amended (as set out in this Variation Order) to record the increase in the Services Fee by amending paragraphs 1.1 and 1.2 and adding a new paragraph 2A to record the amended formula for calculating the Services Fee for each Relevant Month during the Term;
	by the Operator for the procurement of the cleaning services in regard to areas A, E and F, plus (excluding GST) being the margin on such costs (as permitted by paragraph 13.1.3 of Schedule 16);
	4. the Services Fee for each Relevant Month during the Term shall be increased from the Commencement Date to include the Wellington Station Operator Area Cleaning Fee to provide for recovery by the Operator of the Net Financial Impact of \$ (calculated in accordance with the provisions at paragraph 13.1 of Schedule 16) made up of: - Excluding GST) being the direct costs (as permitted by paragraph 13.1.2) incurred

Any further information Nil

regarding the Contract Variation as GWRC wishes to provide	
Any other particulars GWRC requires from the Operator in its Contract Variation Quote (refer para 5.2.5 of Schedule 16)	Nil X April
Signature of GWRC Authorised Representative	(Signature) Name: Greg Campbell Position: Chief Executive Date: 23 5 17
Contract Variation Quote – to be completed by Operator (refer paragraph 5.3, Schedule 16)	
Estimate of Net Financial Impact arising from the proposed	The Net Financial Impact arising from this Contract Variation, calculated in accordance with Part B of Schedule 16 (Change Events and Net Financial Impact) is as follows:
Contract Variation, calculated in accordance with Part B of Schedule 16 (Change Events and Net Financial Impact) and with such estimate provided on an Open Book Basis and accompanied by all working papers and other documentation required to support the estimate (as required by paragraph 5.3 of Schedule 16)	
	Other quotes received:
	The Operator agrees that the proposed amendment to the Services Fee to add the "Wellington Station Operator Area Cleaning Fee" (as set out in this Variation Order) provides for the full recovery of the cost of cleaning areas A, E and F and agrees that:
	the increase to the Services Fee, by the addition of the Wellington Station Operator Area Cleaning Fee shall not be subject to any further variation if the Operator's cleaning subcontractor increases it's fee or the basis upon which costs are recovered or if the cleaning contractor is replaced during the Term of the Partnering Contact; and
	the amount of \$ (excluding GST) calculated in accordance with paragraphs 13.1.2 and 13.1.3 of Schedule 16 (Change Events and Net Financial Impact) being the new "Wellington Station"

	Operator Area Cleaning Fee" shall be NFI Indexed in accordance with the provisions at paragraphs 12.6 and 12.7 of Schedule 16 (Change Events and Net Financial Impact).
Any other particulars specified by GWRC in the Contract Variation Notice as being required	Nil
Signature of Operator Authorised Representative	
	Position: Operator Authorised Representative
	Date:

Approved Variation Order – complete Part C below

	Part C m of approved Variation Order perator by GWRC and GWRL (if variation relates to assets owned by GWRL)
This Variation Order relates to	A Contract Variation (as set out in the Contract Variation Notice above).
Estimate of Net Financial Impact arising from the proposed Contract Variation	The Net Financial Impact is positive and results in the proposed amendment to the Payment Schedule by the addition of the "Wellington Station Operator Area Cleaning Fee" as set out in the attachment to this Contract Variation Notice. GWRC acknowledges and agrees that: 1. the Net Financial Impact determined in real dollars at the date of this Variation Proposal (resulting in the proposed increase to the Services Fee) is (excluding GST) per month; and 2. the amount of the Net Financial Impact being excluding GST) shall be NFI Indexed during the Term in accordance with the provisions at paragraph 12.6 and 12.7 of Schedule 16 (Change Events and Net Financial Impact).
Any change to the Service Fee or Payment Schedule Refer paragraph 6.26 Schedule 16	The Services Fee for each Relevant Month during the Term shall be increased from the Commencement Date to include the sum of (excluding GST) made up as follows:
Time frame within which the proposed Contract Variation will be implemented	From and including the date of this approved Variation Order
Any conditions attached to the Contract Variation	Nil
Notice to proceed	GWRC by completing and issuing this Variation Order to the Operator directs the Operator to implement this Contract Variation in the time frame set ou above.

Signatures of GWRC and GWRL Authorised Representatives

(Signature)
Name: Greg Campbell
Position: Chief Executive

Date: 23/5/(7)

(Signature)
Name: Greg Campbell
Position: Chief Executive

Date: 23/5/(7)

Attachments referred to in this Contract Variation:

Clause / Paragraph	Subject	Amendment				
Schedule 9	(Stations ar	nd Depot Facili	ties)	//		
7.1	Cleaning Obligations	Delete those parts of parts of the table as	Control of the second s	agraph 7.1 in regard to Wellin	gton Station and replace the	
		Station / Depot Facility	Area	Party responsible	Cleaning standard to be met (if applicable)	
		Wellington Station	Common areas (excluding for the avoidance of doubt,	KiwiRail as lessor of the Wellington Station Lease (using KiwiRail cleaning contractor)	The standard specified in KiwiRail's relevant cleaning contract.	
			ground floor public toilets)	Cleaning contract managed by KiwiRail Cost to be met by KiwiRail.		
			That part of the premises comprising the ground floor public toilets	KiwiRail as lessor (using KiwiRail cleaning contractor) Cleaning contract managed by GWRC as lessee in accordance with a cleaning standard approved by KiwiRail (acting reasonably and which shall be approved where such standard is not less than the standard as at the Commencement Date) Monthly cleaning costs	The standard specified in KiwiRail's relevant cleaning contract, adjusted from time to time to include the cleaning standard agreed by GWRC as lessee and KiwiRail.	
				(including consumables) to be invoiced by KiwiRail cleaning contractor direct to GWRC as lessee and paid		

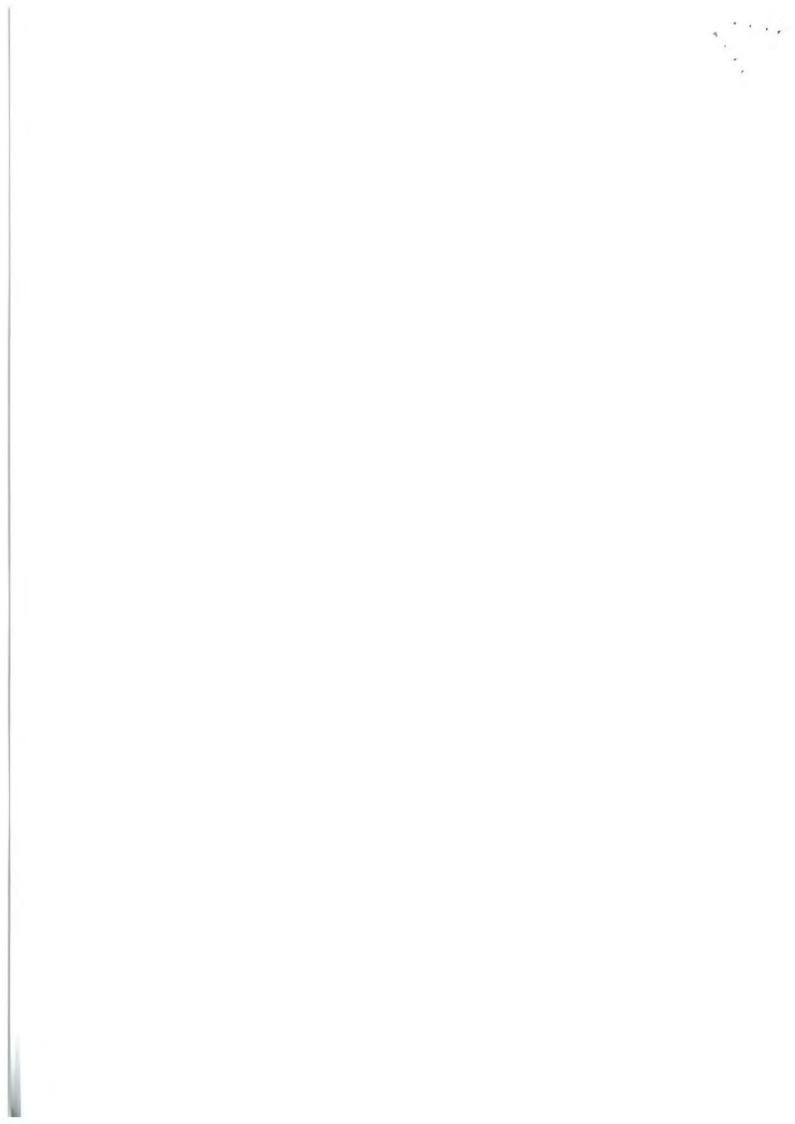
Clause / Paragraph	Subject	Amendment				
		for by GWRC.				
				CWDC - 1 4	The course does and	
			Those parts of the premises shown as Areas A, E and F (as shown on the plan attached to the Wellington Station Lease)	GWRC as lessee (by procuring the Operator to clean those areas under the Operator's cleaning contract, and to meet the cost of such cleaning).	The same clean and tidy condition as such areas were at the Commencement Date, free of any rubbish or waste.	
			All shared areas	KiwiRail as lessor (using KiwiRail cleaning contractor)	The standard specified in KiwiRail's relevant cleaning contract.	
				Cleaning contract managed by KiwiRail		
				Cost to be met by KiwiRail.		
			IFT devices (during IFT Phase 2)	Operator	Good Industry Practice and standard satisfactory to GWRC.	
Clause / Paragraph	Subject	Amendment				
Schedule 6	(Financial	and Performan	ce Regime)			
1.1	Services Fee	The Services Fee co			ime) as follows:	
		(b)	the Wellington	Station Operator Area Clean	ing Fee;	
		(c)	the Vehicle Ser	vices Fee;		
		(d)	the Additional	Vehicle Services Fee;		
		(e)	the Special Eve	ent Services Fee;		
		(f)		nilability Payment;		
		(g)	the Alternative			
		(h)	the Locomotive			
				(GWRC's and GWRL's rights		
		(i)	Performance D Punctuality KP	Deductions in relation to the R PI;	eliability KPI and the	
		275	D	D 1		
		(j)	Reporting rain	ure Deductions;		

Clause / Paragraph	Subject	Amendment			
		(a) the Customer Satisfaction Payment; and			
		(b) the Performance Payment; and			
		1.1.3 the FIM Adjustment annually.			
		Amend paragraph 1.2 of Schedule 6 (Financial and Performance Regime) as follows:			
		1.2 Subject to paragraph 1.3, the formula for calculating the Services Fee for each Relevant Month (rm) during the Term is as follows:			
		$Services\ Fee_{rm} = PSF_{rm} + \underline{WSOACF} + VSF_{rm} + AVSF_{rm} + SESF_{rm} + VAP_{rm} + ATF_{rm} + LSF_{rm} - PD_{rm} - RFD_{rm} + CSP_{rm} + PP_{rm} + FIMA - FIMD$			
		Where:			
		1.2.1 PSF _{rm} is the Passenger Services Fee in respect of the Relevant Month, calculated in accordance with paragraph 2 (Calculation of the Passenger Services Fee);			
		1.2.2 WSOACF _{rm} is the Wellington Station Operator Area Cleaning Fee in respect of the Relevant Month, calculated in accordance with paragraph 2A (Calculation of the Wellington Station Operator Cleaning Fee);			
		1.2.3 VSF _{rm} is the Vehicle Services Fee payable in respect of the Relevant Month calculated in accordance with paragraph 3 (Calculation of the Vehicle Services Fee);			
		1.2.4 AVSF _{rm} is the Additional Vehicle Services Fee (if any) payable in respect of the Relevant Month calculated in accordance with paragraph 4 (Calculation of the Additional Services Fee);			
		1.2.5 SESF _{rm} is the Special Event Services Fee (if any) in respect of the Relevant Month, calculated in accordance with paragraph 4 (Calculation of Special Event Services Fee);			
		1.2.6 VAP _{rm} is the Vehicle Availability Payment in respect of the Relevant Month, calculated in accordance with paragraph 5 (Calculation of Vehicle Availability Payment);			
		1.2.7 ATF _{rm} is the Alternative Transport Fee in respect of the Relevant Month, calculated in accordance with paragraph 12 (Calculation of Alternative Transport Fee);			
		1,2.8 LSF _{rm} is the Locomotive Services Fee in respect of the Relevant Month, calculated in accordance with paragraph 13 (Calculation of Locomotive Services Fee);			
		1.2.9 PD _{rm-1} is the aggregate of all Performance Deductions incurred in respect of Scheduled Services during the Relevant Month immediately preceding the Relevant Month, calculated in accordance with paragraph 6 (Calculation of Performance Deductions);			
		1.2.10 RFD _{rm} is the aggregate of any Reporting Failure Deductions to be deducted from the relevant payment in accordance with paragraph 7 (Calculation of Reporting Failure Deductions);			
		1.2.11 CSP _{rm} is the Customer Satisfaction Payment which:			
		(a) in respect of each Relevant Month falling after the month in which the Surveying Organisation provides the results of a Customer Satisfaction Survey (excluding the Base Customer Satisfaction			

Clause / Paragraph	Subject	Amendment			
		Surveys) pursuant to Annexure 9 (Customer Satisfaction Survey) is the amount (if any) payable in accordance with paragraph 8.2 (Customer Satisfaction Payments) in respect of that Customer Satisfaction Survey; and			
		(b) otherwise, is zero:			
		1.2.12 PP _{rm} is the Performance Payment which:			
		(a) in relation to the last Relevant Month falling in any Half Year, is the aggregate amount (if any) to which the Operator is entitled under paragraph 9.5 (Operator's entitlement to payment); and			
		(b) in relation to all other Relevant Months, is zero.			
		1.2.13 FIMA is the FIM Adjustment in respect of any FIM Calculation Year in respect of which there is a Patronage Excess which:			
		(a) In relation to the Relevant Month falling after the Relevant Month in which notice is served under paragraph 10.2 (Notice of Actual Patronage) where there has been a Patronage Excess in the relevant FIM Calculation Year, is the amount of any FIM Adjustment to which the Operator is entitled under paragraph 10.5 (Payment); and			
		(b) in relation to all other Relevant Months, is zero; and			
		1.2.14 FIMD is the FIM Adjustment in respect of any FIM Calculation Year in respect of which there is a Patronage Shortfall which:			
		(a) in relation to the Relevant Month falling after the Relevant Month in which notice is served under paragraph 10.2 (Notice of Actual Patronage) where there has been a Patronage Shortfall in the relevant FIM Calculation Year, is the amount of any FIM Adjustment to be set off from the Services Fee under paragraph 10.6.2 (Payment); and			
		(b) in relation to all other Relevant Months, is zero.			
<u>New</u> paragraph	Calculation of the Wellington Station Operator Area Cleaning	Add a new paragraph 2A as follows: Calculation of the Wellington Station Operator Area Cleaning Fee 2A.1 Where in a Relevant Month the Operator has incurred cleaning costs for Areas A. E and F a Wellington Station (as described in the table at paragraph 7.1 of Schedule 9 (Station and Depot Facilities)), the Wellington Station Operator Area Cleaning Fee payable in respect of such cleaning costs (subject to receipt of any reasonable supporting information requested by GWRC) shall in respect of a Relevant Month be calculated as follows:			
	Fee	WSOACF _{rm.} = Net Financial Impact Amount _{rm.} , where:			
		Net Financial Impact Amount =			
		accordance with the provisions at paragraph 12.7 of Schedule 16.			

Variation 5

Clause / Paragraph	Subject	Amendment
ſ.	Definitions	Add the following definition: Wellington Station Operator Area Cleaning Fee means the fee payable by GWRC to the Operator for cleaning areas A, E and F at Wellington Station calculated in accordance with paragraph 2A (Calculation of the Wellington Station Operator Area Cleaning Fee) of Schedule 6 (Financial and Performance Regime).



Variation Notice

Partnering Contract:

Variation Number 006 - Maintenance of Electric Shunts

Minor Contract Variation

Note: A Minor Contract Variation is defined at Schedule 1 to mean any Contact Variation which in GWRC's reasonable opinion will not require the Operator to incur Capital Expenditure in excess of \$100,000 (which amount shall not be Indexed) in aggregate over the remainder of the Term

	nor Contract Variation Notice initiate – refer paragraph 5.2, Schedule 16)			
Contract Identifier	Provision of Vehicle Services in regard to Electric Shunts			
	(in accordance with clause 5.29, Partnering Contract)			
Category of Variation	Schedule 6 – (Financial and Performance Regime)			
	Services Fee Table - (set out at Appendix 1 of Schedule 6)			
Contract Variation Number	GWRC: 006 Doc ID: CNTR-7-1046			
Date of issue of Minor Contract Variation Notice	16 July 2018			
Details of the Minor Contract Variation	 GWRL has procured 2 x Zephyr 1800E electric shunt crabs (Electric Shunts) on the basis that the availability of two Electric Shunts would create Operator efficiencies compared to the diesel shunt enabling reduced downtime, reduced staffing requirements, and reduced risk of false alarm evacuations. 			
	 The Electric Shunts are included in the definition of "Vehicles" a described at Schedule 10 (Operating Lease). The Operator (Transde Wellington) is therefore required to maintain the Electric Shunts i accordance with the obligations set out at Schedule 4 (Vehicle Services). 			
	3. Amend Schedule 6 (Financial and Performance Regime) by amendin Appendix 1- Services Fee Table to include a revised "Initial Vehicl Services Fee" amount based on the Hyundai Rotem quote (Attachment 1 including their subcontractor Buildmaster quote (Attachment 2) which comprises the following (subject to the exclusions set out below):			
	 If the Electric Shunts operate materially more than their intended use of daily average of 2 hours per working day each (calculated at 261 days year) over the period of the first year of operation then this Variation Order may be reviewed. 			

	 If and when the operational efficiencies capable of being delivered as a result of this investment are implemented, this Variation Order shall be reviewed.
	 Amend the Locomotive Services fee to be passed on to GWRC by the Operator by reducing the Locomotive services fee by \$ per annum (indexed).
Date by which the Minor Contract Variation must be implemented	Subject to issue of approved Variation Order by GWRC and GWRL (see Part C below)
Methodology and process by which Operator must implement the Minor Contract Variation	As per Schedule 6, paragraph 3, the <i>Vehicle Services Fee</i> to be increased to cover the cost of maintaining the Electric Shunts from the date that the Electric Shunts are accepted by GWRL and made available to the Operator for use in service, which was the 23 April 2018.
	As per Schedule 6, paragraph 13, the <i>Locomotive Services Fee</i> is to decrease to apply from that date that the Electric Shunts are accepted by GWRL and made available to the Operator for use in service.
Extent to which GWRC (acting reasonably) considers that the Operator will require relief from its obligations under the Partnering Contract as a result of the implementation of the Minor Contract Variation	Not Applicable
Any further information regarding the Minor Contract Variation as GWRC wishes to provide	The preliminary Electric Shunt maintenance spares are available for the Operator (at its discretion) to purchase from GWRL for the total sum of NZ\$ blus GST for both Electric Shunts for years 1 and 2 (refer to Attachment 3 for list of Parts per Electric Shunt) or such lesser amount as may be agreed to between the Parties. Any material or parts left after the end of the maintenance period, GWRC will consider as a transferring asset.
	The parts will be delivered before the maintenance service starts for inventory and inclusion in MMIS purposes and all required information for entering to MMIS must be provided by GWRC to the Operator, upon request by the Operator to the Operator's satisfaction.
	A copy of warranty agreement, test and commissioning results, the drawings manuals, check lists and all the other relevant technical documentation will be transferred from the manufacturer and be delivered to the Operator before the warranty commences.
Any other particulars GWRC requires from the Operator in its Minor Contract Variation Quote (refer para 5.2.5 of Schedule 16)	The Operator's Licence will be amended to include the operation of the Electric shunts
Signature of GWRC Authorised Representative	Name: Wayne Hastie
	Position: GM Public Transport Date: 18 July 2012

Minor Contract Variation Quote - to be completed by Operator (refer paragraph 5.3, Schedule 16) Estimate of Net Financial Impact arising from the Initial Vehicle Services Fee (relating to this Variation) proposed Minor Contract Variation, calculated in accordance with Part B of Schedule 16 (Change Events and Net Financial Impact) and with such estimate provided on an Open Book Basis and accompanied by all working papers and other documentation required to support the estimate (as required by paragraph 5.3 of Schedule 16) 2 Locomotive Fee Locomotive Services fee to be passed on to GWRC by the Operator by reducing the Locomotive services fee by (GST exclusive) per annum (indexed). Any other particulars specified by GWRC in the If and when the operational efficiencies capable of being delivered as a result Minor Contract Variation Notice as being required of this investment are implemented, this Variation Order shall be reviewed Signature of Operator Authorised Representative Name: Position: Managing Director/Operator Authorised Representative 13 August 2018

Approved Variation Order

Fori	Part C m of approved Variation Order
This Variation Order relates to	A Minor Contact Variation (as set out in the Minor Contract Variation Notice above)
Estimate of Net Financial Impact arising from the proposed Contract Variation	1 Initial Vehicle Services Fee (for this Variation)
	2 Locomotive Fee Locomotive Services fee to be passed on to GWRC by the Operator by reducing the Locomotive services fee by S
Any change to the Service Fee or Payment Schedule Refer paragraph 6.26 Schedule 16	Schedule 6 (Financial and Performance Regime) Appendix 1- Services Fee Table and columns "Initial Vehicle Services Fee", "Vehicle Services Fee – IFT", "Vehicle Services Fee – RS1", and "Vehicle Services Fee – Both Pre Priced Options", shall be increased as indicated below:
	Initial Vehicle Services Fee (for this Variation)
	1 Locomotive Fee Locomotive Services fee to be passed on to GWRC by the Operator by reducing the Locomotive services fee by GST exclusive) per annum (indexed).
Time frame within which the proposed Contract Variation will be implemented	Contract Variation is implemented from the date that the Electric Shunts are accepted by GWRL and made available to the Operator for use in service which is the 23 April 2018.
Any conditions attached to the Contract Variation	If and when the operational efficiencies capable of being delivered as a resulof this investment are implemented, this Variation Order shall be reviewed.
Notice to proceed	GWRC by completing and issuing this Variation Order to the Operator directs the Operator to implement this Contract Variation in the time frame set our above.
Signatures of GWRC and GWRL Authorised Representatives	(Signature) Name: Wayne Hastie Position: GM Public Transport/GWRC Authorised Representative Date: 17 August 2018 (Signature) Name: Wayne Hastie Position: GM Public Transport/GWRL Authorised Representative

Summary of Attachments referred to in this Contract Variation:

Attachment 1 - Rotem's QuotationNo: HRNZQ0006

Attachment 2 – Buildmaster Quote 12 dated 7 March 2018

Attachment 3 – Electric Shunt list of parts available for purchase



HYUNDAI-ROTEM COMPANY

Hyundai Motor Group Wellington EMU Depot, NZBN: 9429031481144 154 Thorndon Quay, Pipitea, Wellington, New Zealand www.hyundai-rotem.co.kr

Attachment 1 to revised VO 6

To: Transdev Wellington Limited

CN:5164521

L8,469 Latrobe Street

Melbourne

Victoria, 3000

Australia

GST No: 105022247

Customer No : 10001

Date : 11 May 2018

Quotation No : HRNZQ0006

Pages : 1/1

Note: This Minor Contract Variation quoation is based on the Minor Contract Variation Notice that was issued by GWRC to the Operator as anticipated by clause 5.29.4 (c) of the Partnering Contract to allow the Operator to submit a Minor Contract Variation Quote setting out the Operator's estimate of the Net Financial Impact of assuming the obligation to carry out Maintenance Works in respect of the Electric Shunts.



		* -
		w

11-15 Torrens Terrace, Mount Cook PO BOX 6056, Wellington service@buildmaster.co.nz (04) 387 7148



Date: 7th March 2018

To: Eion Smoothy,

Hyundai Rotem

RE: EMU Depot – Maintenance of Zephir Crabs

Quote: #12

Thank you for the opportunity to quote for the following works:

Maintenance of 2x Zephir Crabs. Maintenance includes all scheduled and unscheduled maintenance with a parts value of up to collectively over one calendar year. Please see appendix 1 for scheduled maintenance.

What we have allowed for:

Tags and Bid Clarifications:



Regards,

Matthew Banks

Project Manager, Buildmaster Ltd

(04) 387 7148 / (021) 388 813 matthew@buildmaster.co.nz









11-15 Torrens Terrace, Mount Cook PO BOX 6056, Wellington service@buildmaster.co.nz (04) 387 7148



APPENDIX 1:











	MAINTENENCE – Zephir Crab 1800E						
Date:	Checked By:						
remove the second to the second							

Note: The house meter records the total hours of operation of the motor and is to be used to program all the maintenance procedures listed below. Carry out all the maintenance jobs at the hourly intervals indicated. Service more frequently if the vehicle is used in heavy duty conditions

Description	Job Description	Within first 200 hrs	Every 500 hrs	Every 1000 hrs	Every 3000 hrs
	 Make sure none of the load bearing elements are damaged 	Χ			
Chassis	 Make sure the fittings are tight 	Χ			
	Make sure the bonnets are secured in place	X			
	Check the securing screws	Х			
Driving Wheel	Grease the rotation bearing			Х	PET STREET, T. S. S. S. SANSKE S. MINSTERNA
Driving valleer	Change the oil	X		Χ	
	Check the oil level	Χ	Χ		
	 Make sure they are not worn and check their firm attachment 	X			
Wheels	Check the supports and attachments	X			PROPERTY OF A TO STAGE TO STAGE TO A TO STAGE TO STAGE TO A TO STAGE TO STAGE TO A TO STAGE TO STAGE TO STAGE TO A TO STAGE TO S
	Grease the greasing points	Χ			
	Check the seal of the fittings	X	- An administrative community		
	Check the oil level	Χ	Х		
Hydraulic System	 Check the seal and firm attachment of the hydraulic jacks 	etradistati stati a maakkama aan gay abg	Χ		
,	Make sure none of the pipes are damaged		Χ		
	Make sure the filter is clean	X			
	Change the hydraulic oil	all a for and a discount and a country of groups			Χ
	Make sure all the screws and nuts are tight			Х	1
Electric Motor Manifold	 Check the couplings and electrical connections, verify that there are not traces of overheating 			X	
Bearings	Check the temperature – check for vibrations and noise			Х	











Isolation	• Check using the Megger instrument, especially in damp workplaces, the isolation value: it must not be lower than $2M\Omega$	X	Mayor Cabulation (Mayor Cabulation)		
	 Check the correct positioning of the grounding brushes (if present) 		Χ		
	Make sure none of the screws are loose	* * * * * * * * * * * * * * * * * * *		Х	
Screws	 Make sure the electrical connections are tight so that no localized heating occurs 			Χ	
:	Clean generally			Χ	
Windings	• Make sure the isolation towards earth is higher than or equal to $2M\Omega$		Advantage and the second of the second	X	
	Make sure the battery cables are not damaged		Χ		
Battery	Check the density and level of the electroly		Χ		
	 Make sure the terminals are tight – lubricate with grease 		Х		
	Make sure the screws are tight	Χ	Χ		
Rail Axles	Check and register the brakes		Χ		and a second
	Check and change oil if necessary	Χ	1	Χ	
Art Joints	Grease the pins	Х	Χ		
Driving Wheel	Check the efficiency and setting	Х			
Brake	Check the state of the pads		Χ		
Pressure accumulators	Check the preload pressure	X		X	
Hydraulic Pump	Check and change the oil if necessary				Χ
	Drain the condensate	X	The state of the s		
	Change the compressor air filter		Х		
Pneumatic System	Change the compressor oil			Χ	
	Replace the air filters			Χ	
	Replace the dryer cartridge			Χ	











APPENDIX 16:









11-15 Torrens Terrace, Mount Cook PO BOX 6056, Wellington (04) 387 7148 service@buildmaster.co.nz













Attachment 3 – Electric Shunt parts available for purchase

Preliminary and Maintenance Spares available for purchase by Operator (per Electric Shunt)



Variation Proposal

Partnering Contract: Variation Number 007 – Maintenance of Masterton Compressor

Minor Contact Variation - GWRC to complete the form of notice below

Note: A Minor Contract Variation is defined at Schedule 1 to mean any Contact Variation which in GWRC's reasonable opinion will not require the Operator to incur Capital Expenditure in excess of (which amount shall not be Indexed) in aggregate over the remainder of the Term, but excludes:

- (a) the implementation of a Pre Priced Option following the issue of an order given by GWRC pursuant to paragraph 4.1(
 Implementation of Pre Priced Options) of Schedule 16; and
- (b) any changes made to the Timetable or the Rail Unit Timetable in accordance with the Timetable Change Process, any changes made to the Rail Network Timetable and, in either case, any associated changes to the Working Timetable; and
- (c) any Special Event Services

	Minor Contract Variation Notice ay initiate – refer paragraph 5.2, Schedule 16)
Contract Identifier	Provision of Vehicle Services in regard to expanding definition of EMU Depot Plant and Equipment, to include the compressor based in Masterton.
Category of Variation	Schedule 1 (Definitions and Interpretation), definition of EMU Depot Plant and Equipment
	Schedule 4 (Vehicle Services), Appendix 5 (EMU Depot Plant and Equipment Manual)
	Schedule 6 – (Financial and Performance Regime), Appendix 1 (Services Fees Table)
Contract Variation Number	GWRC:CNTR-7-1053 Operator: PT0416 Variation 7
Date of issue of Minor Contract Variation Notice	29 May 2017
Details of the Minor Contract Variation	Amend Schedule 1 (Definitions and Interpretation) to expand the definition of "EMU Depot Plant and Equipment" as follows:
	means the plant and equipment:
	A. located at the EMU Depot including:
	(a) Atlas Copco GA 15 air compressor;
	(b) Heggenscheidt wheel lathe;
	(c) Kapiti Engnrg 3000kg SWL- road 5 dropt table;
	(d) Kapiti Engnrg 3000 SWL – road 1;
	(e) Monocrane 15 tonne 1;
	(f) Monocrane 15 tonne 2;
	(g) Jib crane;
	(h) Monorail crane;
	(i) Twin section train wash system;
	(j) Windhoff train jacking system;
	(k) Wheel lathe air compressor;

	(I) Wheel	lathe winch and capstans; a	ind		
	(m) 250kg jib crane; and				
	B. located at Masterton				
	(n) Atlas Copco GX5 Air Compressor.				
		dule 4 (Vehicle Services) b and Equipment Manual) to table			
	Equipment	Document Title	Document Number	Revision/ Date	
	Atlas Copco GX5 Air Compressor located at Masterton	Atlas Copco Preventive Maintenance Agreement (attached to Service Proposal for Hyundai Rotem dated 20 April 2017)	NA	NA	
	Appendix 1 - Services Fee to cover the Compressor	dule 6 (Financial and Perfo - Services Fee Table to in " to include an additional \$ [x additional cost of maintain at Masterton. Appendix 1 (Services Fees attached to the Variation Or	clude a revised (xx) per annum fining the Atlas (Table) will be p	l "Initial Vehicle rom 1 July 2016 Copco GX5 Ai	
Date by which the Minor Contract Variation must be implemented	1 August 2017 Subject to issue of below)	of approved Variation Order	by GWRC and G	WRL(see Part (
Methodology and process by which Operator must implement the Minor Contract Variation	The Vehicle Servi	ces Fee set out in the Servicet Financial Impact incurred e additional air compressor foval.	d by the Opera	tor in regard to	
Extent to which GWRC (acting reasonably) considers that the Operator will require relief from its obligations under the Partnering Contract as a result of the implementation of the Minor Contract Variation	Not Applicable				
Any further information regarding the Minor Contract Variation as GWRC wishes to provide	Not applicable				
Any other particulars GWRC requires from the Operator in its Minor Contract Variation Quote (refer para 5.2.5 of Schedule 16)	Not applicable		1		
Signature of GWRC Authorised Representative	Position: GWR	(Signature) is Gabara C Authorised Representation	ve		

Minor Contract Variation Quote – to be completed by Operator (refer paragraph 5.3, Schedule 16)	
Estimate of Net Financial Impact arising from the proposed Minor Contract Variation, calculated in accordance with Part B of Schedule 16 (Change Events and Net Financial Impact) and with such estimate provided on an Open Book Basis and accompanied by all working papers and other documentation required to support the estimate (as required by paragraph 5.3 of Schedule 16)	
Any other particulars specified by GWRC in the Minor Contract Variation Notice as being required	Nil
Signature of Operator Authorised Representative	
	Position: Operator Authorised Representative Date:

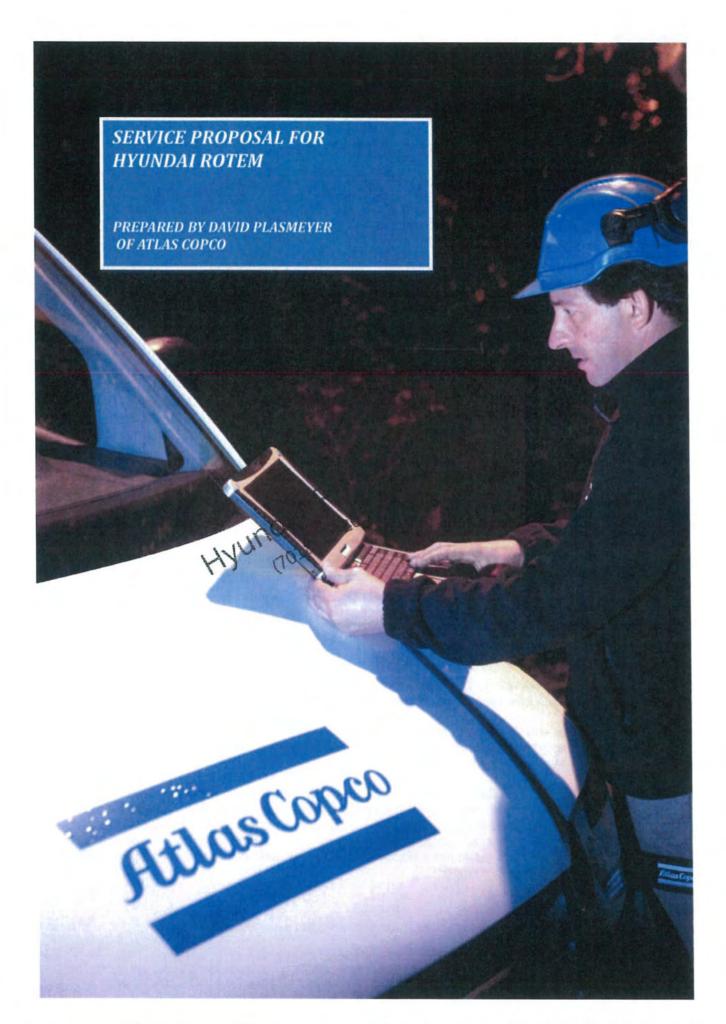
Approved Variation Order - complete Part C below

	Part C m of approved Variation Order perator by GWRC and GWRL (if variation relates to assets owned by GWRL)
This Variation Order relates to	A Minor Contact Variation (as set out in the Minor Contract Variation Notice above)
Estimate of Net Financial Impact arising from the proposed Contract Variation	
Any change to the Service Fee or Payment Schedule Refer paragraph 6.26 Schedule 16	
Time frame within which the proposed Contract Variation will be implemented	This variation is to be initiated immediately to align with the programmed maintenance requirements.
Any conditions attached to the Contract Variation	Nil
Notice to proceed	GWRC by completing and issuing this Variation Order to the Operator directs the Operator to implement this Contract Variation in the time frame set ou above.
Signatures of GWRC and GWRL Authorised Representatives	Name: Angus Gabara Position: GWRC Authorised Representative Date: 3/(0/18) (Signature) Name: Angus Gabara Position: GWRL Authorised Representative Date: 3/(0/18)

Summary of Attachments (if any) referred to in this Contract Variation:

Attachment 1 – Service Proposal prepared for Hyundai Rotem by Atlas Copco dated 20 April 2017

Attachment 2 – Services Fees Table (Revision [1], prepared in response to Variation Order 7)





20 April 2017

Hyundai Rotem – EMU Depot Thorndon Quay Wellington

Attention: David Reynolds

Service Proposal for Hyundai Rotem air compressors

Dear, Mr Reynolds

Thank you for this opportunity to submit the tender on the compressor service and maintenance systems.

Atlas Copco is a world leading provider of industrial productivity solutions. The group and services range from compressed air and gas equipment, generators, construction and mining equipment, industrial tools and assembly systems, to related aftermarket and rental. In close co-operation with customers and business partners, and with 143 years of experience, Atlas Copco is always striving for superior productivity. Locally, Atlas Copco (NZ) Limited have been supporting and servicing New Zealand companies for more than 63 years.

Headquartered in Stockholm, Sweden, the Group's global reach spans more than 180 markets. In 2014 Atlas Copco had revenue of 94 Billion SEK (10,3) Billion Euros) and 44,000 employees.

The New Zealand Head Office is located in Mt Wellington, Auckland. We have Branches throughout New Zealand and also look after many customers in the Pacific from Samoa, Fiji and Tahiti. Atlas Copco has 23 qualified Service Technicians across New Zealand.

The Atlas Copco Service operation is unique. With years of experience and ongoing investment, we are the only major compressor manufacturer providing a dedicated service tailored to our customers needs. We under-write our own service.

Atlas Copco has a range of service agreements to suit your needs. Maintenance budgets become clear and simple, with prices fixed in advance. You choose the service options and time period.

Atlas Copco New Zealand is an active member is the Electricity Commissions Compressed Air Systems Energy Efficiency Program. We have a fully accredited Auditor available to carry out the Compressed Air audits for your Company, free of charge.

The Atlas Copco New Zealand's Service Plans are designed to be both cost effective and worry-free for our customers. Atlas Copco will relieve you of the burden of maintenance planning and will ensure servicing of your equipment is carried out on a regular basis as per manufacturer specifications. This type of plan dramatically reduces breakdowns that can be costly and unnecessary, as potential problems will be recognised and appropriate preventive measures advised and taken before any damage has occurred to your plant or product.





Atlas Copco Preventative Maintenance Agreement

The Atlas Copco Preventative Maintenance Plan covers all servicing recommended by the original manufacture, at the correct intervals and in a pro-active manner. It offers fixed routine maintenance costs and allows for easy maintenance cost forecasting. The plan can be customized and adjusted at any time.

The plan can be adjusted or altered to suit your needs.

The prices for these maintenance plans are based on the running hours of the compressors per annum Any additional work or necessary repairs, discovered during preventative maintenance is quoted for on a fixed price basis and can be carried out at either the next visit or during an additional visit depending on the urgency.

A Preventative Maintenance Plan Includes;

- All planned maintenance, including parts,(as recommended in the operators hand book)

- Guaranteed parts availability.

 Detailed reporting. Electronic reports emailed to nominated confact.

 Data storage

 Out of hours service (available as an option)

 Reduced administration

 No Inventory.

 Remote monitoring. (available as an option)

I am proposing a Maintenance Plan be re-implemented across your site, which will provide you with all scheduled services over a three year period.

Included in these options would be all air compressors annual servicing requirements, all parts, oil, labour, and travel required during this time.

Atlas Copco operates a 24 hour / 7 day call out roster to ensure our customers every needs are met.



Energy Efficiency Recommendations

There is an option to identify various energy efficiency saving opportunities which could be utilised throughout your Compressed Air System. Implementation of the various recommendations will improve the overall compressor efficiency performance. The cost of not doing so will be reflected in increased Maintenance costs, as more compressors will be operating.



TOTAL SITE SAVING OPPORTUNITIES

Leakage: An industry average is between 20 - 30 % leak rate on compressed air systems

Pressure: In many cases, plants run with excess pressure. Reducing pressure across site of 1 Bar, can

give energy savings of 7%

Configuration: Compressor configurations can be changed to give a more efficient system.

I recommend that you take up the opportunity to look at all site compressed air energy requirements. There is good potential to save each site kWhrs on more efficient compressed air systems, which equates to money being saved on power and maintenance



Hyundai Rotem 01 14:15:12

Ty out Air 1d-

Atlas Copco can also carry out Air Leakage Surveys as part of the service plan, allowing you to budget for these added value features. Repairs, if you would like Atlas Copco to carry out, will incur an extra charge. The Survey can be included within the service plan to ensure your continued energy efficiency savings are monitored. Adding air leakage to the site Maintenance schedule, will further enhance the site savings, and also reduce the maintenance required as machines will not be required to work as often as they do now. Your site will realise power savings as well as reduced maintenance costs.



Air Leak / Vacuum Detection Survey:

Atlas Copco can carry out leak detection surveys to show leak location plus size/cost. These leaks will be tagged and full report given to assist planning for repair. This can be added to your Service Agreement. All surveys include an itemized report, as per attached sample.



Smart Link Uptime.

I have also included an option to the service proposal called **Smart Link Uptime**. This enables both yourself and Atlas Copco to receive email or text notification of any unexpected event with the compressor. This includes general warnings, service requirements and shut-downs. It allows us to be able to react immediately to any problem identified with the compressor, be it calling site to check the machine, or get underway to site. The Smart Link box is already installed on your compressor. All we need to do is activate a license, of which there is an annual fee, and it is up and running. **Benefits**

- · Prevention of shutdowns or failures.
- · Improved reliability and increased lifetime of non-consumable parts.
- Reduced time-intensive administration through pro-active scheduling of maintenance
- Atlas Copco gets contacted in the middle of the night if there is a breakdown, rather than the customer. We can get in there and fix it with minimal downtime for the customer.

Monthly report emailed to you with status of the compressor.

The Atlas Copco notification products offer a convenient early warning system. With these solutions we can monitor the status of your compressor in real-time, and rapidly react to any situation, preventing breakdowns and shortening downtime, these tools allow you to keep operational costs to a minimum.

Intelligent notification

Critical events require different handling than others. Smart Link Uptime guarantees each notification is sent to the correct group of people using the most suitable medium –SMS and / or e-mail.



Quality Air Test

There is an opportunity available to test the quality of air by way of various pollutant tests. We can test for the following:

Oil content in Air

Carbon Dioxide

Carbon Monoxide

Nitrous Fumes

Sulphur Dioxide

Moisture

This will be an important addition to your Occupational Health and Safety reporting. The test is relatively simple and we can carry out the test at six monthly or annual intervals



Compressed Air Equipment included in proposal:

Service agreement would be for a term of three years with invoicing set up to suit your requirements. This will be reviewed annually with a right of renewal. Services required by Hyundai Rotem – EMU Depot over the next three years include:

Compressor Pricing Summary

Air Compressors

I Service Inspection Visits A Service Annual service B Service 8,000 hr service

Hyundai Rotem - Visit Schedule





Atlas Copco GA15FF Service Scope

Description	A vi	sit B vi	sit I visit
Follow Customer Specific Safety Rules	×	x	х
Check service readings	×	x	x
Check condition of cooling fan assy (AC)	×	×	×
Check fastenings	x	x	×
Check electrical components	×	×	×
Check motor greasing+overload setting	×	X	×
Check oil level	×	×	×
Check cooling air flow	×	x	×
Check coolers functions	X	X	×
Change compressor oil	×	X	
Change compressor oil filter	×	×	
Change air filter element(s)	×	x	
Measure SPM	x	x	×
Change oil separator element		x	
Change belt(s)		X	1
Overhaul unloader valve		JAS.	(,
Overhaul min. press valve	M	X	
Change thermostatic valve	0/1,	o x	
Overhaul water drain	15.	LX	
Check Coupling/Belts	1 A.x	×	×
Check Hourmeters)J x	×	x
Check safeties	x	x	×
Check/clean condensate drain(s)	×	x	×
Check pressure and temperature gauges	×	x	×
Check for en water- & pibleakage	×	X	×
Change belt(s) Overhaul unloader valve Overhaul min. press valve Change thermostatic valve Overhaul water drain Check Coupling/Belts Check Hourmeters Check safeties Check/clean condensate drain(s) Check pressure and temperature gauges Check for air water- & pilleakage Clean air filter & filter housing Test run Compressor	×	x	×
Test run Compressor	×	×	×
Write up service report sheet	×	x	×

Inline Filter Service Scope

Description	Fvisit	Lvisit
Follow Customer Specific Safety Rules	×	X
Inspection	×	×
Check/clean condensate drain(s)	x	
Check pressure drop	×	x
Change cartridge	x	
Resemble Filter	×	
Test Run and check for leaks	×	×



Compare HV04 Service Scope

Description	Av	isit C vi	it I visit
Follow Customer Specific Safety Rules	X	×	×
Check for air leaks	X	×	
Check for oil leaks	×	×	
Check oil temperature	×	×	
Check discharge air temperature	×	×	
Change seal on minimum pressure valve	X	×	
Change seal on air inlet valve	x	×	
Check Coupling/Belts	×	×	
Clean compressor	×	×	
Change Compressor oil	×	×	
Change compressor oil filter	×	×	
Change air filter element(s)	×	×	
Change vacuum valve seals	×	×	
Clean coolers (outside only)	×	×	
Grease motor bearings (If required)	-0	V x	
Change oil separator element	18) x	
Change drive coupling / belt(s)) -	×	
Check oil level	n x	×	
Test Run Compressor	X	×	×
Grease motor bearings (If required) Change oil separator element Change drive coupling / belt(s) Check oil level Test Run Compressor Write Up Service Report Sheet	×	×	×

Atlas Copco GXFF Service Scope

Description	A vi	sit B visit	t visit
Follow Customer Specific Safety Rules	x	×	x
Inspection	X	×	×
Check/clean condensate drain(s)	X	×	×
Change air filter element(s)	×	×	
Change compressor oil filter	x	×	
Change oil separator element	×	×	
Change compressor oil	x	×	
Change belt(s)	×	×	
Check Dewpoint & Indicator Lamps(FFonly)		×	
Overhaul water drain		×	
Clean compressor	×	×	X
Check for air- water- & oil leakage	×	X	X
Check electrical components	×	X	X
Check safeties	×	×	×
Check Coupling/Belts	x	x	×
Clean filter housing	x	×	×
Check condition of cooling fan assy (AC)	×	×	X
Check oil level	×	X	X
Test Run Compressor	x	×	X
Write Up Service Report Sheet	x	x	×



Guaranteed Response Time: In the case of an unexpected event with your compressors, we will guarantee that we will have a technician on your site within 2.5 hours from time of Notification + SMS. or phone call.

Labour Rates: There will be an extra charge for work done outside the scope of work. Labour and Mileage Rates will be guaranteed for 12 months from execution of agreement. These rates will be reviewed annually.

Normal Hours: 8 hours will constitute an ordinary day. An ordinary day may be worked between the hours of 6 am and 6 pm on each day from Monday to Friday inclusive.

Overtime: Overtime is defined as

Time worked in excess of the ordinary hours of ceasing work. Overtime is paid at a rate of time & a half for the first 3 hours and double time thereafter.

Double time is paid after noon on Saturdays and all day Sunday

Hoping this is to your requirements and assists with budgeting for annual servicing costs. Look forward to hearing any feedback on this proposal and would be keen to discuss any alterations to suit your requirements. Also included below is information covering.

Benefits of Service Plan

completed at each visit Atlas Copco Service Record

Atlas Copco Branch Locations

If you wish to discuss this maintenance proposal further, please contact me on the contact details below.

Kind Regards,

David Plasmeyer Sales Engineer

Copy of service report sheet giving customer records of work done plus pressure/temperature readings. One sheet is left with customer while second sheet has information logged onto Atlas Copco data base for future reference.



SERVICE PLAN BENEFITS



- Economical than ad-hoc maintenance
- Easy budgeting, fixed annual fees
- Optimal utilisation for the equipment by correct service and maintenance
- No need to train own employees to do the service
- No need for special tools
- Improvements in equipment are up to date (ECR)

 No cost for administration for subscriber.

 Planned shut-downs for the equipment of the equipm

- Plant uptime will be optimised with correct service and maintenance

Atlas Copco (NZ) Ltd Service Departments

Main Service Branches

Auckland	Address	50 Carbine Road Mt Wellington
	Phone	09 579 4069
	Fax	09 525 2006
Hamilton	Address	273A Sandwich Road Te Rapa
	Phone	07 849 3934
	Fax	07 849 3901
T	Di	007.040.4400
Tauranga	Phone	027 248 1129
Rotorua	Address	164 Riri Street
Rotorda	Phone	07 349 4960
	. Lietae	
	Fax	07 349 4961 027 241 2659 027 497 5807 027 224 9552 027 233 0951 06 328 8664 1 / 65 NA Son Street Perone 04 563 6649 04 568 3278 8 12
Hawkes Bay	Phone	027 241 2659
Hawkes Day	Litone	2/12
Taranaki	Phone	027 497 5807
i ai attain	1 11-11-	50(1,1)
Sth Taranaki	Phone	027 224 9552
		W 175.
Manawatu	Phone	027 233 0951
	Fax	06 328 8664 Q O
		1.00
Wellington	Address	1 / 65 Nalson Street Perone
	Phone	04,568,6049
	Fax	04 568 3278 8
Same and	1	13 170
Wgtn Eng	Phone	027 238 5241
Christchurch	Address	Unit 2 79 Waterloo Road
Omistenarch	Phone	03 349 9054
	Fax	03 349 9052
Dunedin	Address	313 Kaikorai Valley Road
	Phone	03 453 4318
	Fax	03 453 4317
	1 547	00 100 1011





Standard Terms & Conditions

UNLESS OTHERWISE AGREED BY THE COMPANY IN WRITING, THE FOLLOWING TERMS AND CONDITIONS APPLY TO THE COMPANY'S QUOTATIONS AND ACCEPTANCES OF ORDERS:

- The "Company" means Atlas Copco (NZ) Limited.

 The "Customer" means the applicant(s) under these Terms and Conditions. If there is more than one Customer, these Terms and Conditions will bind each Customer. (b) (c)
- The "Costomer means are applicability index analytical transfer and other products supplied by the Company and, in respect of each order of Goods from the Customer accepted by the Company, means the Goods described in the invoice issued by the Company in respect of the relevant order.

 "PPSA" means the Personal Property Securities Act 1999.

In the event of any conflict, these terms and conditions (together with any terms and conditions agreed in writing by the Company and the Customer) will prevail over any other document including (but not limited to) any invoices.

The Customer is to execute documents and do such further acts as may be required by the Company to register the security interest granted to the Company under these terms and conditions under the PPSA or for any other purpose whatsoever. (f)

Delivery 2

Delivery

Goods quoted "ex stock" are offered subject to availability at the time an order is placed. Orders for Goods are accepted on date of order subject to any necessary import license being available. Indent delivery times are subject to confirmation by the Company at time of order. If the Company is prevented from or delayed in delivering any goods within the time stipulated for delivery for any reason or cause beyond its control, then the time for delivery will be extended by the period during which such prevention or delay operated. Delivery to the Customer occurs when the goods are dispatched from the Company's Delivery Point.

Delivery Point

All goods are dispatched "Ex Warehouse". Mt Wellington, Auckland, Freight costs to customers account

From the time the Goods are dispatched by the Company to the Customer the risk of any loss or damage to, or deterioration of, those Goods from whatever cause will be and is borne by the Customer. The Customer is solely responsible for arranging insurance for Goods dispatched by the Company.

Prices

All prices quoted for Goods or services are subject to the application of clause 7. Prices quoted for Goods ex stock are fixed. All other prices guoted are based on the Company's prices at date of quotation but are subject to afteration (in the Company's sole discretion) prior to invoicing as a result of any variation in exchange rates, customs duties, sales tax, other governmental imports, freight charges, or insurance rates which may occur between the dates of quotation and delivery. Any variation resulting in an increase in price shall be borne by the Customer

Where the purchase price of Goods or services ordered is less than \$25.00, the purchase price must be paid in cash. The Company may at its sole discretion agree in writing to grant or withdraw (as the case may be) credit to the Customer for the payment of the purchase price(s) or Goods of services in accordance with these Terms and Conditions. Otherwise, the purchase price(s) of all Goods sold or services provided must be paid in full in cash on the very lift credit is granted payment is due:

within 7 days from the date of the Company invoice for all machine sales and installation costs; and

(b) by the 20th of the month following date of invoice for all other Goods and services.

by the 20" of the month following date of invoice for all other Goods and services.

The Company reserves the right to charge interest at the rate of 2% per month on any overdue amounts included in the balance outstanding at the start of the month.

Credit facilities may be withdrawn by the Company at any time without prior notice. The customer agreed to indemnity and keep indemnited the Company against any costs incurred by the Company in connection to legal fees on an indemnity basis and debt collection agency fees.

Prices quoted do not (unless otherwise indicated) include Goods and Services Tax which will be added where applicable.

Validity

Unless previously withdrawn by the Company all quotations provided by the Company remain open for acceptance by the Customer for a period of 30 days from the date of quotation. Thereafter, all quotations are subject to the Company's Confirmation.

Transfer of Property in Goods Supplied to Customers

Property in Goods Supplied to Customers

Unless previously withdrawn by the Company all quotations provided by the Company remain open for acceptance by the Customer for a period of 30 days from the date of quotation. Thereafier, all quotations are subject to the Company's Confirmation.

Transfer of Property in Goods Supplied to Customers

Property in all Goods supplied to the Customer remains with the Company until payment in full of the purchase price is received by the Company.

Until such payment is received the Customer is only the page of the Goods supplied to it and the Customer agrees to:

i. accept possession of the Goods supplied to it in such a maturer which enabled them or it (as the case may be) to be readily identifiable as the property of the Company; and iii. maintain the Goods supplied in good of the Goods immediately to the Company if called upon to do so.

If payment is not received by the due data significant in the Customer has not returned the Goods, after demand, the Company's employees or agents may enter into the Customer's premises at any reasonable time to recover possession of the Goods supplied without liability for any damage which may be caused. (c) caused

Until ownership of the Goods passes, the Customer i. waives its right under the PPSA to: (d)

receive a copy of any verification statement;

receive a copy of any financing change statement; receive any notice that the Company intends to sell the Goods or to retain the Goods on enforcement of the security interest (as defined in PPSA) granted to C the Company under these terms, object to the Company's proposal to retain the Goods in satisfaction of any obligation owed by the Customer to the Company, D.

receive a statement of account on sale of the Goods:

redeem the Goods; and

where any Good becomes an accession, as defined in the PPSA, receive notice of removal of the accession, apply to the court for an order concerning the removal of the accession and not have any goods damaged when the Company removes the accession; G

must not give the Company a written demand or allow any other person to give the Company a written demand requiring the Company to register a financing change statement under the PPSA or enter into or allow any other person to enter into the register of personal property securities a financing change statement under PPSA

(e) The Customer acknowledges that it has received value as at the date of the first delivery of the Goods and has not agreed to postpone the time for attachment of the security interest (as defined in the PPSA) granted to the Company under these terms

Goods Returned for Credit

Goods will only be accepted for credit by prior agreement with the Company, or to the extent that they have been incorrectly supplied.

Returned Goods must be delivered freight prepaid to the Company, and must be received by the Company in original condition.

A restocking fee of 20% (GST exclusive) of invoice value will be charged for all returned Goods, with a minimum fee of \$20 (GST exclusive), unless Goods have been (C) incorrectly supplied.

Goods made to special order or purchased specifically for a Customer cannot be returned or credited unless those Goods are not to specifications or otherwise not in (d) accordance with any express or implied term of the contract

11 Shortages in Delivery

The Company will only accept claims for short delivery if it is notified in writing within ten (10) days of the delivery of the Goods.

New Atlas Copco equipment is guaranteed for a period of twelve months. For spare parts the guarantee period is three months and for service labour the guarantee period is one month. For all of the three categories above, the guarantee period commences from the time of delivery to the customer. It is a condition precedent of this guarantee that the customer must notify the Company in writing of any defect in or damage to the Goods or deficiency in the Services within the guarantee period stipulated above. This guarantee applies to new Goods only and is void if non genuine parts are used, if maintenance is outside the Company's guidelines or if the Goods

are used outside quoted design specifications. For the avoidance of doubt, this guarantee cannot be transferred to any other party.

The Company's entire liability under this guarantee is, at its option, to repair or replace the Goods or to provide the Services again (as the case may be), which are found (in the case of Goods) to be defective or damaged as a result of the Company's defective workmanship, materials or design (fair wear and tear excepted) or (in the case of Services) to be defective following inspection by the Company or its agents. The Company is not obliged to provide substitute Goods while the original Goods are

inoperable other than to the extent expressly required by law.

All work carried out by the Company on Goods under its guarantee obligations will be carried out at one of the Company's service centers during normal working hours. All Goods must be forwarded freight paid to the service center nominated by the Company and will be returned freight collect to the Customer. If requested, the Company may, at its discretion, comply with its warranty obligations at a Customer's site, but the Customer is responsible for all costs incurred by the Company in respect of such working including, without limitation, travelling time, service vehicle costs, accommodation and penal costs for all call outs and overtime.

available from the Company's stock, such parts will be freighted by surface freight at the Company's cost. The Company, will, if requested by a Customer, freight replacement parts by air freight out the Customer is responsible for all additional freight costs incurred.

(d) The Company is not liable in contract, tort or otherwise for any loss, injury, cost or damages (whether direct or indirect) arising out of the supply, operation or use of any defective or damaged. Goods or deficient services installed or provided by the Company. The Company accepts no liability for defective or damaged equipment or materials supplied to it for resale by others, either as individual parts or following incorporation in Goods supplied by the Company and such defective equipment or materials are subject to the relevant maker's warrantly only.

(e) The guarantees contained in the Consumer Guarantees Act 1993 are excluded where the Customer acquires Goods from the Company for the purposes of business in ferms of sections 2 and 43 of the Consumer Guarantees. Act: All warranties, conditions, liabilities or representations in relation to the Goods or Services (including warranties in respect of faults; defects, the condition, quality, suitability and fitness of the Goods) whether expressed or implied, whether stalutory or otherwise are expressly excluded to the fullest extent permitted by law.

(f) To the extent that the provisions of the contractual Remedies Act 1979 may apply to these Terms and Conditions in relation to Goods and services sections 6 – 10 inclusive of the Act are hereby expressly excluded and if any liability of whatever nature is established by the Customer against the Company in any way whatsoever the

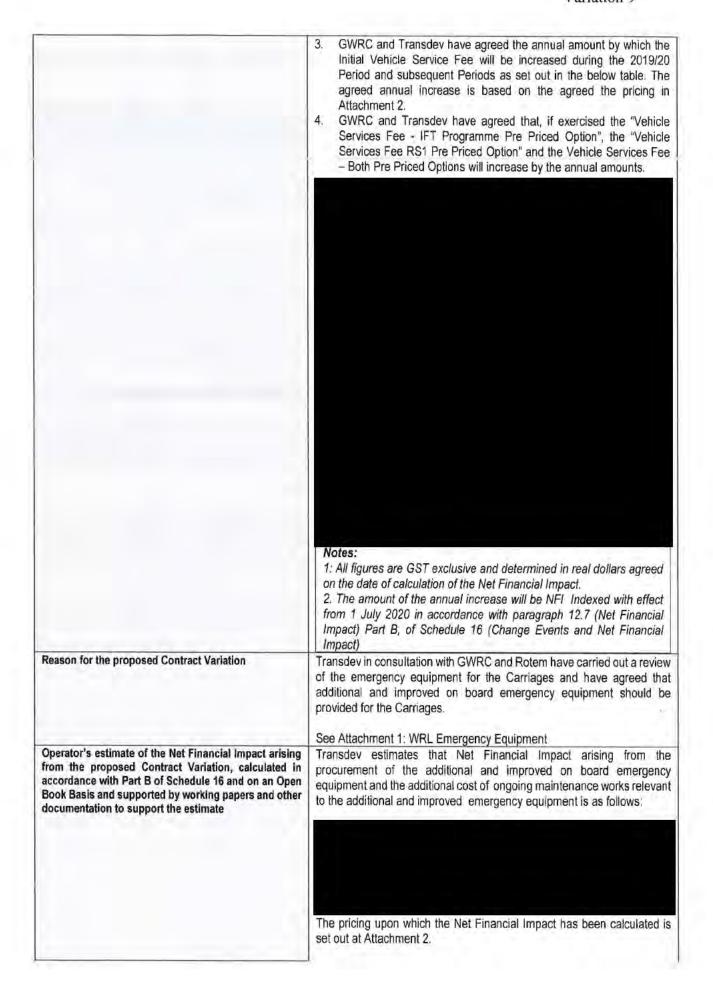
inclusive of the Act are hereby expressly excluded and if any liability of whatever nature is established by the Customer against the Company in any way whatsoever the Customer's sole and exclusive remedy shall be limited to those remedies provided in these Terms and Conditions PROVIDED HOWEVER that where these Terms and Conditions do not provide a remedy for misrepresentation or repudiation or breach of contract or for any of the other matters to which sections 6 – 10 inclusive relate the sole remedy of the Customer shall be damages and such damages shall be limited to \$1,000 or the Customer's loss whichever is the lesser.

Wundai Rotem Company



Operator initiated Contract Variation number 9– Operator to complete the following form

Contract Identifier	Emergency Equipment for Carriages (in accordance with clause Maintained Assets, Partnering Contract (the PC).	
Category of Variation		- Maintenance works
Contract Variation Number	GWRC	Operator: PC PT0416 Variation 9
Date of issue of Variation Proposal	19 July 2019	Operator: 1 o 1 10410 Variation 0
Proposed date on which the Contract Variation is to take effect	III TO THE REAL PROPERTY OF THE PARTY OF THE	ue of approved Variation Order by GWRC.
Details of proposed Contract Variation	1. Transdev W provision of provision of Assets are k In proper In good applicat In accordance The Maintain Vehicles inclinate Vehicle emergency Carriages. 2. Transdev in Subcontracte a review of agreed that equipment st	Vehicle Services. The Vehicle Services include the maintenance works to ensure that all of the Maintained ept maintained, protected and preserved: er working order direpair and condition and in compliance with all ole Law; and rdance with Good Industry Practice. The dissets include the GWRL Assets, which include the uding all assets, items and systems installed or located es. Items included in the Carriages include the on-board equipment used by Transdev in the operation of the consultation with GWRC and the Vehicle Services or, Hyundai Rotem Wellington (Rotem) have carried out the emergency equipment for the Carriages and have additional and/or improved on board emergency hould be provided in the Carriages. The vehicle Services or, Hyundai Rotem Wellington (Rotem) have carried out the emergency equipment for the Carriages and have additional and/or improved on board emergency hould be provided in the Carriages.



If the Net Financial Impact is negative, the proposed reduction in the Services Fee (refer paragraph 8.9.4, Schedule 16)	Not applicable
Note - If the Net Financial Impact is negative paragraph 8.9.4 provides that the Service Fee shall be reduced by an amount equal to 50% of the amount (expressed as a positive figure) by which the Net Financial Impact is less than zero	
Timeframe within which the proposed Contract Variation will be implemented	From the date this Variation Proposal is approved by GWRC, for the remaining Term of the Partnering Contract.
Methodology and process by which the Operator proposes to implement the proposed Contract Variation	The Vehicle Services Fee will be increased to include the Net Financial Impact incurred by Transdev to cover the cost of the additional and/or improved equipment, as set out in the above table.
	Transdev agrees to ensure that:
	The agreed equipment is purchased and installed into the Carriages The Carriage Fleet Maintenance Plan will be updated, and Operational and maintenance staff will be briefed of the changes
The offers of the same of Control Visite Control Vi	, ,
The effect (if any) that the proposed Contract Variation will have on the Operator's ability to meet the requirements of, or achieve (as applicable) the Reliability KPI, the Punctuality KPI or the PI Achieve Benchmarks, the Vehicle Service Objectives and Outcomes, the Passenger Services Objectives and Outcomes, the Vehicle Use in Service Outputs and the Hand back Standards.	Nil
Effect (if any) that the proposed Contract Variation will have on: (a) the Operator's ability to perform its obligations in accordance with the Transaction Documents (b) the safe and lawful operation of passenger services on the Wellington Network	Nil
Effect (if any) that the proposed Contract Variation will have on: (c) the condition, value, or whole of life cost of any GWRL System, GWRL Asset, GWRC	The GWRL Assets will include the new emergency equipment which will supplement and improve the emergency equipment installed and located in the Carriage Vehicles.
System, GWRC Asset or Maintained Asset or on the safe and lawful use of any of the forgoing	The new and improved emergency equipment forms part of the Vehicles provided to the Transdev under the terms of the Operating Lease.
	It is acknowledged and agreed that the new and improved emergency equipment that is the subject of this Variation will form part of the Vehicles, be owned by GWRL and used by the Operator in accordance with the terms of the Operating Lease.
Effect (if any) that the proposed Contract Variation will have on: (d) any warranty or guarantee (including any claim thereunder) given by a supplier or manufacturer in relation to any GWRL System, GWRC Asset or Maintained Asset or any other assets or systems described at clause 12.1 (to the extent that the terms of the warranty or guarantee have been provided to the Operator) or on any other obligations or liabilities of such supplier or manufacturer (to the extent that the Operator has been made	Nil

Operator Approved Modification Services If the Contract Variation includes any enhancement or modification to the EMUs or Carriages specify: - whether carrying out of such enhancement or modification will give rise (or is likely to give rise) the unavailability of any Vehicle which in turn would entitle the Operator to claim an Excusing Event; and - the Operator's reasonable estimate of the likely period of unavailability (if any) of the affected Vehicles	Nil
(refer para 5.3 Schedule 4)	
Changes to Vehicle maintenance, EMU Depot Plant and Equipment Manual or Electric Shunt Manual If the Contract Variation includes any change to the Matangi Fleet Maintenance Plan, the Carriage Fleet Maintenance Plan, the EMU Depot and Equipment Manual or the Electric Shunt Manual (including any proposed change to a requirement contained therein or any change to any Spares, Rotable Items, Special Tools, General Tools or EMU Depot Plant and Equipment referred to in such documents) include: - full details about the proposed change, including drafting changes - an explanation as to the reasons for the proposed change will achieve the same or a better result in relation to the maintenance of the Vehicles or the EMU Depot Plant and Equipment - a signed statement from the Operator (in accordance with the requirements a paragraph 17.2.3 of Schedule 4) - be accompanied by any consultant's reports or internal reports prepared in relation to the proposed change - be accompanied by written confirmation from the relevant supplier or manufacturer (as required by paragraph 17.2.5 Schedule 4)	Update the Carriage Fleet Maintenance Plan to reflect the installation of new emergency equipment, and ensure that it is effectively maintained i.e. i) section 23 within "M9383 SW Operating Instructions for Onboard Staff"; ii) section 20 within "M9398 SE Operating Instructions for Onboard Staff" iii) within appropriate checklists to confirm all emergency equipment is within date and serviceable.
The value for money for GWRC arising from the	Nil
proposed Contract Variation Any additional information requested by GWRC in connection with the proposed Contract Variation	Nil
Signature of Operator Authorised Representative	Name: Position: Operator Authorised Representative Date: 3 June 2000

Approved Variation Order – complete Part C below

Part C Form of approved Variation Order (Must be completed, signed and issued to the Operator by GWRC and GWRL) (if variation relates to assets owned by GWRL) This Variation Order relates to An Operator initiated Contract Variation (as set out in the above table) Estimate of Net Financial Impact arising from the Vehicle Services Fee (relating to this Variation) proposed Contract Variation The basis upon which the Net Financial Impact has been established is set out at Attachment 2. Any change to the Service Fee or Payment Vehicle Services Fee (relating to this Variation) Schedule Refer paragraph 6.26 Schedule 16 The Initial Vehicle Service Fee will be increased during the 2019/20 Period and subsequent Periods as set out in the below table. The agreed annual increase is based on the agreed the pricing in Attachment 2. If exercised the "Vehicle Services Fee - IFT Programme Pre Priced Option". the "Vehicle Services Fee RS1 Pre Priced Option" and the "Vehicle Services Fee - Both Pre Priced Options" will increase from the date of exercise by the amount the same amount. Periods Annual Reason for Effective date Vehicle increase Service Fee increase 2019/20 Additional Date of GWRC cost incurred approval of this to procure the Variation additional Proposal. improved WRL Emergency (to be invoiced Equipment as one amount) From Additional annual From July 2020/21 maintenance cost 2020, invoiced (and for (i. e cost of monthly each for the maintaining the following additional / Periods set improved out in the Emergency Services Equipment Fees Table (Appendix 1, Schedule 6) 1: All figures are GST exclusive and determined in real dollars on the date the Net Financial Impact was calculated and agreed. 2. The amount of the annual increase will be NFI Indexed with effect from 1 July 2020 in accordance with paragraph 12.7 (Net Financial Impact) Part B, of Schedule 16 (Change Events and Net Financial Impact)

Partnering Contract	CONFIDENTIAL Variation 9
PT0416	
Time frame within which the proposed Contract Variation will be implemented Any conditions attached to the Contract Variation	From date of GWRC signed Approved Variation Order and on-going throughout the life of the Partnering Contract The agreed new emergency equipment must remain in date and serviceable for the life of the contract. Transdev to report progress regarding: i) Equipment purchased and installed into the carriages ii) The Carriage Fleet Maintenance Plan updated
Notice to proceed	iii) Operational and maintenance staff briefed of the changes
Signatures of GWRC and GWRL Authorised Representatives	GWRC by completing and issuing this Variation Order to the Operator direct the Operator to implement this Contract Variation in the time frame set of above.
	(Signature) Name: Scott Gallacher Position: GWRC Authorised Representative
	Date: 3/06/2020
	- Vint fall -
	: (Signature) Name: Scott Gallacher Position GWRL Authorised Representative
Summary of Attachments (if ny)	Date: 3/06/2020 Contract Variation:

referred to in this a

Attachment 1 - WRL Emergency Equipment

Attachment 2 - Agreed pricing for calculation of NFI

Attachment 1: Wairarapa Service - Emergency Safety Equipment

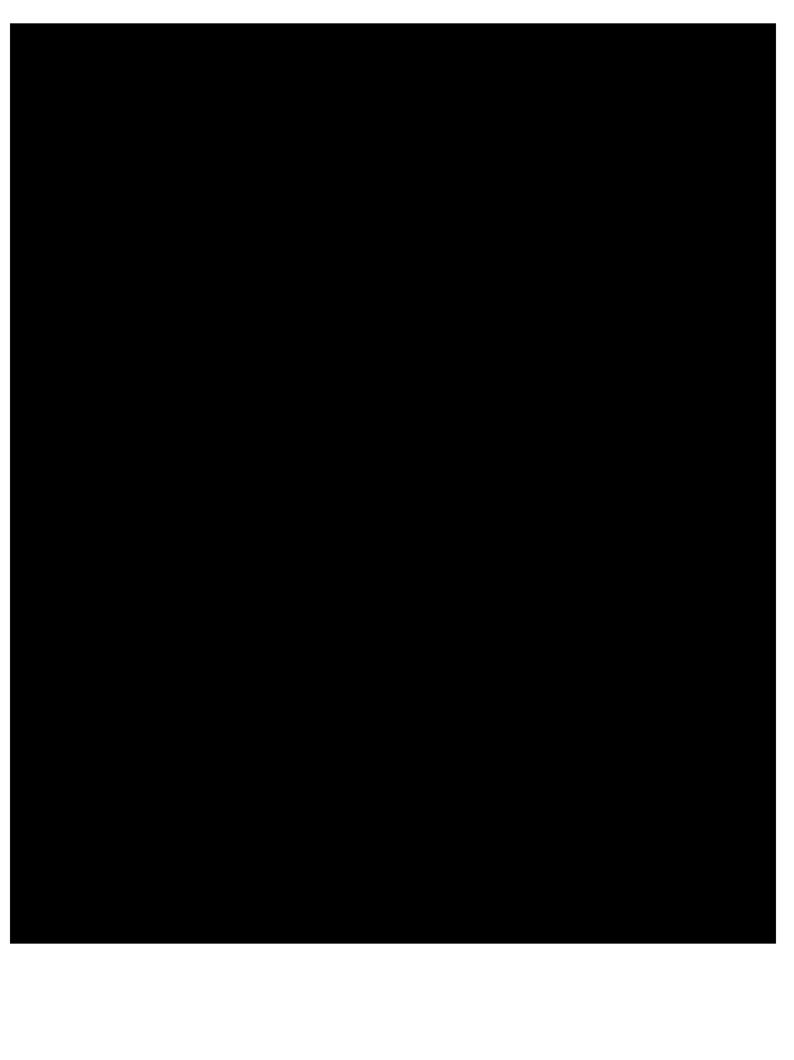


Location: SES – SWS Servery (S Key for access) [4 vehicles]	Location: SEG – SWG – AG Generator (S Key for access) [5 vehicles]	Below are the minimum safety requirements for passenger trains travelling through the Rimutaka Tunnel as outlined in the:
Box C	Box A	
Grab and Go bag includes 1 x Gas Masks and 2 x Canisters	2 x Gas Mask and 4 x Canisters	KiwiRail Emergency Management Plan Rimutaka Tunnel Appendix – December 2015 amended dd mm 2019
1 x Dolphin LED Torch plus spare battery	Box B	
25 x Glow Sticks	1 x Enhanced First Aid Kit	On Passenger Train Equipment Register
25 x Foil Blankets	1 x Dolphin LED Torch plus spare battery	Emergency Equipment:
1 x JAI Key (opens ICP containers and gates)	135 x Foil Blankets	Enhanced First Aid Kits x 3 (Box B, C and E)
1 x Enhanced First Aid Kit	66 x Dynamo Torches	660 x Foil Emergency Blankets (Box B, C and yellow bag)
Box D	Tunnel TARPs and Duty Cards	Gas Monitor x 1 (NO₂ and CO) – On Board Personnel
2 x Dolphin LED Torch plus spare battery	Also located in the SEG/SWG carriages and AG van	Gas Masks x 3 and Canisters x 6 (Box A and C)
66 x Dynamo Torches	1 Spare Red LED tail light	Torches
Box E	1 x Radio with charger	4 LED large (Box B,C and D)
1 x Enhanced First Aid Kit	Duct Tape	
Yellow Bags 90 x Glow Sticks (labelled glow sticks for passenger comfort) Cable Ties (mixed, small and large) Megaphone and spare batteries Tools	132 small for issue to passengers (Box B and L 135 x Light Sticks (Box C)	
		25 x Light Sticks (Box C)
		1 x JAI Key (opens ICP containers and gates)
500 x Foil Blankets	Wheel Chocks	Mio 7h doily chook to confirm to so an Engage
3 x Radios with three chargers	Wooden Ladder	Mis 7b daily check to confirm tags on Emergency
(only 2 x 2 required for 6 or less carriages)		Equipment Container unbroken
TDW personnel Gas Monitor Portable radios First Aid kits		Note: Inspection/Maintenance = 6 monthly routine check, maintenance
		Random Checks by HSEAT team

Hyundai Rotem



Maintained by Alsco				
		<u> </u>		
One off contract variation amo	unt for Enhanced First Aid Kits			
(excludes costs for other additi	onal emergency equipment)			
Annual contract variation amou	unt for Enhanced First Aid Kits			
(excludes costs for other additi	onal emergency equipment)			
			<u>, </u>	
	Standard First Aid Kit Total Cost			
	Standard First Aid Kit Total Cost			
	Enhanced First Aid Kits Total cost			
		<u> </u>		
One off contract variation amo	unt for Enhanced First Aid Kits			
(excludes costs for other additi	onal emergency equipment)			
Annual contract variation amou	unt for Enhanced First Aid Kits			
(excludes costs for other additi	onal emergency equipment)			
Enhanced First Aid Kits	Maintained by Alsco			
Zimaneca i ii se / iia Kits	Maintained by HRW			



n				
Item				
Grab and Go bag				
Gas Mask				
Gas Canister				
Dolphin LED Torch				
Dolphin Incandescent Torch				
Torch Spare Battery				
Glow Sticks				
Foil Blankets				
JAI Key				
Trauma Kit				
First Aid Kit				
Dynamo Torches				
Radio charger (only 2 x 2 required for 6 or less carriages)				
Tunnel TARPs and Duty Cards				
Spare Red LED tail light				
Duct Tape Roll				
Megaphone				
Megaphone spare battery				
Wheel Chocks (Set with flag)				
Wooden Ladder				
Cable Ties Large (min 1/2 bag)				
Cable Ties Small (min 1/2 bag)				
Screw Driver (with various bits)				
Crow Bar				
Crescent				
Screwdriver - Phillips				
Screwdriver - Flat Blade				
Pliers - Combination				
Tools state current Items				
Tools state current Items				
Tools state current Items				
Tools state current Items				
Tools state current Items				

First Aid Kit Information

Platinum Gauze Swabs Non Woven Sterile 4 ply 7.5cm x 7.5cm 2 pcs per

Variation Notice

Partnering Contract: Variation Number 010 – Calculation of FIM Adjustment

Minor Contract Variation

Note: A Minor Contract Variation is defined at Schedule 1 to mean any Contact Variation which in GWRC's reasonable opinion will not require the Operator to incur Capital Expenditure in excess of \$100,000 (which amount shall not be Indexed) in aggregate over the remainder of the Term

	nor Contract Variation Notice y initiate – refer paragraph 5.2, Schedule 16)
Contract Identifier	Calculation of FIM Adjustment, (in accordance with clause10 of Schedule 6 of the Partnering Contract)
Category of Variation	Schedule 6 – (Financial and Performance Regime) Assumed Trips Table – (set out at Appendix 4 of Schedule 6)
Contract Variation Number	GWRC: 010 Doc ID: CNTR-7-1460 Operator: PT0416 Variation 10
Date of issue of Minor Contract Variation Notice	25 November 2019
Details of the Minor Contract Variation	GWRC and Transdev both agree that 38 trips for the Monthly Ticket is more reflective of usage based on the number of working days in a month. GWRC and Transdev have agreed to amend Appendix 4 – (Assumed Trips Table) of Schedule 6 (Financial and Performance Regime) by changing the number of Trips per Ticket for the Monthly Ticket from 35 trips to 38 trips.
Date by which the Minor Contract Variation must be implemented	Schedule 6 (Financial and Performance Regime) – Revision 2, a copy of which is attached replaces Revision 1 from Variation Order 2. Subject to issue of approved Variation Order by GWRC and GWRL (see Part C below)
Methodology and process by which Operator must implement the Minor Contract Variation	FIM Calculation for Financial Year 2019 will be calculated accordingly.
Extent to which GWRC (acting reasonably) considers that the Operator will require relief from its obligations under the Partnering Contract as a result of the implementation of the Minor Contract Variation	Not applicable
Any further information regarding the Minor Contract Variation as GWRC wishes to provide	Not applicable
Any other particulars GWRC requires from the Operator in its Minor Contract Variation Quote (refer para 5.2.5 of Schedule 16)	Not applicable
Signature of GWRC Authorised Representative	Name: Angus Gabara Position: GWRC Authorised Representative Date: 3/12/19

Minor Contract Variation Quote – to be completed by Operator (refer paragraph 5.3, Schedule 16)

Estimate of Net Financial Impact arising from the proposed Minor Contract Variation, calculated in accordance with Part B of Schedule 16 (Change Events and Net Financial Impact) and with such estimate provided on an Open Book Basis and accompanied by all working papers and other documentation required to support the estimate (as required by paragraph 5.3 of Schedule 16)

Any other particulars specified by GWRC in the Minor Contract Variation Notice as being required

Signature of Operator Authorised Representative

Not applicable

Nome:
Position: Managing Director
Date: 4 (2)

Approved Variation Order

Part C Form of approved Variation Order		
This Variation Order relates to	A Minor Contact Variation (as set out in the Minor Contract Variation Notice above)	
Estimate of Net Financial Impact arising from the proposed Contract Variation	This is not an NFI Event	
Any change to the Service Fee or Payment Schedule Refer paragraph 6.26 Schedule 16		
Time frame within which the proposed Contract Variation will be implemented	The variation will be applied for the 2019 Financial Year (the monthly ticke type is amended for the purposes of the FIM Calculation effective from 1 July 2018.	
Any conditions attached to the Contract Variation	Not applicable	
Notice to proceed	GWRC by completing and issuing this Variation Order to the Operator directs the Operator to implement this Contract Variation in the time frame set our above.	
Signatures of GWRC and GWRL Authorised Representatives	Name: Angus Gabara Position: GWRC Authorised Representative Date: 3/12/19 Name: Angus Gabara Position: GWRL Authorised Representative Date: 3/12/19	

Summary of Attachments referred to in this Contract Variation:

Attachment 1 – Schedule 6 (Financial and Performance Regime) – Revision 2 (Approved by Variation Order 10) – Final (CNTR-7-1467)

Approved Variation Order – complete Part C below

Part C Form of approved Variation Order (Must be completed, signed and issued to the Operator by GWRC and GWRL (if variation relates to assets owned by GW		
This Variation Order relates to	An Operator initiated Contract Variation (as set out in the above table)	
Estimate of Net Financial Impact arising from the proposed Contract Variation		
Any change to the Service Fee or Payment Schedule Refer paragraph 6.26 Schedule 16		
and the state of t	Subject to the issue of approved Variation Order by GWRC	
Time frame within which the proposed Contract Variation will be implemented Any conditions attached to the Contract Variation	Nil	
Notice to proceed	GWRC by completing and issuing this Variation Order to Transdev directs Transdev to implement this Contract Variation in the timeframe set out above.	
Signatures of GWRC and GWRL Authorised Representatives	Name: Fiona Abbott' Position: GWRC Authorised Representative Date: 22/12/2021	

Variation Proposal

Operator initiated Contract Variation Number 012 - Carriage inspection interval changes

Operator initiated Contract Variation (refer paragraph 8, Schedule 16) Details of Variation Proposal		
Contract Identifier	Carriage Fleet Maintenance Plan: Carriage Inspection interval changes	
Category of Variation	Vehicle Services - Change to Carriage Fleet Maintenance Plan	
Contract Variation Number	GWRC: PT0416 012 Operator: PT0416 Variation 12	
Date of issue of Variation Proposal	24 November 2021	
Proposed date on which the Contract Variation is to take effect	Subject to the date of issue of approved Variation Order by GWRC.	
Details of proposed Contract Variation	Partnering Contract Requirement	
	Transdev Wellington Limited (Transdev) is required to carry out the daily checks as part of the Vehicle Services provided for the SE and SW carriage fleets.	
	The daily checks are required to be performed in accordance with the Carriage Fleet Maintenance Plan described at Appendix 4 (Carriage Fleet Maintenance Plan) of Schedule 4 (Vehicle Services) of the Partnering Contract.	
	The daily check is a non-evasive inspection of the Carriages before passenger service; it includes condition, security and functionality of essential systems on the Carriages. It also includes the daily requirements for the generator sets and instructions for checks to be carried out in the case of a consist change.	
	Previous Depot Check and Servicing Practice KiwiRail Limited (the previous maintainer) carried out the equivalent checks based on kilometre intervals (1,250km). The checks were not time based (i.e. daily) and KiwiRail carried out servicing as required.	
	From 3 July 2016 (the date Transdev commenced provision of Vehicle Services) Transdev continued the KiwiRail practice of carrying out the checks based on km-intervals and not time based (i.e. daily) and the servicing as required.	
	This issue was brought to GWRC's attention in April 2017.	
	Change process	
	The Partnering Contract requires that changes to maintenance plans are initiated by Transdev as an "Operator initiated Contract Variation". The Variation Proposal must include the information required by paragraph 8.2 of Schedule 16 (Change Events and Net Financial Impact), and be accompanied by the information required by paragraph 17.2 of Schedule 4 (Vehicle Services).	

The relevant information required by paragraph 17.2, Schedule 4 has been provided as part of this Variation Proposal and as attachments to this Variation Proposal.

It has been agreed with GWRC in this case that the following information is not required:

- 1. A consultant's report or internal report prepared by or on behalf of TDW in relation to the proposed change (required by para 17.2.4, Schedule 4);
- Written confirmation from the relevant supplier or manufacturer confirming that the proposed change will not void, breach or have an adverse effect on any supplier's or manufacturer's warranty or guarantee given in relation to the Vehicles or the EMU Depot Plant and Equipment (as applicable) by that supplier or manufacturer.

Proposed change to Carriage Fleet Maintenance Plan

The current Carriage Fleet Maintenance Plan includes the following documents:

- Carriage Fleet Maintenance Plan, documentation version ROLST -10-24 -- Issue 1
- Check Classification, Daily , documentation version Loco 651 & 652 – Revision 1 (SW Carriage)
- Check Classification Daily , documentation version Loco 556 – Revision 4 (SE Carriage)

The proposed changes to the Carriage Fleet Maintenance Plan documents are:

Change reference to "Daily Check" to "Depot Check"

It is proposed that all references to the "Daily Check" are deleted and replaced by "Depot Check.

Change to servicing interval

It is proposed that the interval for the "Daily Check" is changed from "daily" to a Km-intervals"; it being understood that a Depot Check is required to be carried out on all consists that are stabled in the Wellington Carriage Depot or yard during normal weekday hours. The maximum interval between depot checks is 1,500km at which point it must be carried out irrelevant of the vehicle location.

Transdev and GWRC have agreed that:

- the current references in the Carriage Fleet Maintenance Plan to "Daily Check" will be amended to "Depot Check"
- the checks currently described in the Carriage Fleet Maintenance Plan as "Daily Check" should continue to be carried out according to the Km-intervals
- the intervals of the Depot Checks specified in the Carriage Fleet Maintenance Plan will be varied from time based (i.e. formerly daily check) to the Km-based maintenance scheme. In addition, the limits of the Kminterval shall be increased from 1,250km to 1,500km

to allow for the weekend running of a consist with the AG van attached in 2016.

Appendix 4 (Carriage Fleet Maintenance Plan) (ROLST-10-24 – Issue 1) at Schedule 4 of the Partnering Contact will be varied to record the change as follows:

- All references to 'Daily Check" will be replaced with "Depot Check"
- The description of the "Daily Check" will be deleted and replaced with the following description of the "Depot Check":

Depot Check

A Depot Check is required to be carried out on all consists that are stabled in the Wellington Carriage Depot or yard during normal weekday hours. The maximum interval between depot checks is 1,500km at which point it must be carried out irrelevant of the vehicle location.

The Depot Check is a non-invasive inspection of the Carriages; it includes condition, security and functionality of essential systems on the Carriages. It also includes the requirements for the generator sets and instructions for checks to be carried out in the case of a consist change.

The description of "Servicing" shall be deleted and replaced with the following description of "Servicing"

Servicing

Servicing includes refuelling of generator cars, discharging toilet wastewater tanks and refilling of potable water and is carried out as required.

Attachment 1 - ECR (F)-M-686 which defines the Carriage depot check interval limits.

Attachment 2 - which sets out the marked up change to the Carriage Fleet Maintenance Plan (Revision 1)

Financial Impact of the proposed change

The Vehicle Services Fee was based on the Carriages receiving daily checks and servicing per year.

If approved the proposed change to the Carriage Fleet Maintenance Plan will result in the total number of checks and servicing reducing to per year.

Given the cost of each check and servicing included in the Initial Vehicle Service Fee (at Appendix 1 of Schedule 5) is NZ\$ the difference in the numbers of inspection between and cost saving of NZ\$ per annum (excluding GST).

As the Net Financial Impact is negative the Vehicle Service Fee will be reduced by 6 of the per annum (excluding GST).

Reason for the proposed Contract Variation	This variation is to record a change to the Carriage Fleet Maintenance Plan to adjust the intervals of Depot Checks (currently referred to as 'daily checks' to reflect the current kilometre-based maintenance scheme (1,500km intervals).
Operator's estimate of the Net Financial Impact arising from the proposed Contract Variation, calculated in accordance with Part B	In accordance with ECR (F) M-686 Define the Carriage Depot Check interval limits, the total number of depot checks and

of Schedule 16 and on an Open Book Basis and supported by working papers and other documentation to support the estimate	
If the Net Financial Impact is negative, the proposed reduction in the Services Fee (refer paragraph 8.9.4, Schedule 16)	Please refer to amount deductible per annum from the Vehicle Services Fee which is expressed as a positive figure as below.
Note - If the Net Financial impact is negative paragraph 8.9.4 provides that the Service Fee shall be reduced by an amount equal to 50% of the amount (expressed as a positive figure) by which the Net Financial impact is less than zero	(Currency: NZD, excl. GST)

Timeframe within which the proposed Contract Variation will be implemented	Subject to the issue of approved Variation Order by Transdev which will be issued following the execution of the corresponding Variation Order by GWRC in accordance with the Partnering Contract
Methodology and process by which the Operator proposes to implement the proposed Contract Variation	The relevant technical documentation will be revised according to ECR (F)-M-686. (refer Attachment 1)
The effect (if any) that the proposed Contract Variation will have on the Operator's ability to meet the requirements of, or achieve (as applicable) the Reliability KPI, the Punctuality KPI or the PI Achieve Benchmarks, the Vehicle Service Objectives and Outcomes, the Passenger Services Objectives and Outcomes, the Vehicle Use in Service Outputs and the Hand back Standards.	Any failure to meet the Passenger Service Objectives, the Vehicle Service Objectives, the contractual KPI's, the Vehicle Use in Service Outputs and the Hand Back Standards which occurs as a consequence of the proposed change shall remain the sole responsibility of Transdev.
Effect (if any) that the proposed Contract Variation will have on: (a) the Operator's ability to perform its obligations in accordance with the Transaction Documents (b) the safe and lawful operation of passenger services on the Wellington Network	This Contract Variation will not have any effect on Transdev's ability to perform its obligations in accordance with the Transaction Documents or the safe and lawful maintenance of the Vehicles.
Effect (if any) that the proposed Contract Variation will have on: (c) the condition, value, or whole of life cost of any GWRL System, GWRL Asset, GWRC System, GWRC Asset or Maintained Asset or on the safe and lawful use of any of the forgoing	Transdev confirms that the proposed changes will not have any negative impact on the condition, value, or whole of life cost of any GWRL System, GWRL Asset, GWRC System, GWRC Asset or Maintained Asset or on the safe and lawful use of these assets.
Effect (if any) that the proposed Contract Variation will have on: (d) any warranty or guarantee (including any claim thereunder) given by a supplier or manufacturer in relation to any GWRL. System, GWRL. Asset, GWRC System, GWRC Asset or Maintained Asset or any other assets or systems described at clause 12.1 (to the extent that the terms of the warranty or guarantee have been provided to the Operator) or on any other obligations or liabilities of such supplier or manufacturer (to the extent that the Operator has been made aware of the same)	Transdev confirms that the proposed changes will not invalidate any warranty or guarantee
Operator Approved Modification Services If the Contract Variation includes any enhancement or modification to the EMUs or Carriages specify: - whether carrying out of such enhancement or modification will give rise (or is likely to give rise) the unavailability of any Vehicle which in turn would entitle the Operator to claim an Excusing Event; and - the Operator's reasonable estimate of the likely period of unavailability (if any) of the affected Vehicles (refer para 5.3 Schedule 4)	This Variation Proposal is irrelevant to Modification Services.

Description	Proposal		
Full details about the proposed change, including drafting changes	Full details about the proposed change to the Carriage Fleet Maintenance Plan and the Vehicle Services Fee were provided in the former section of this proposal (Details of proposed Contract Variation)		
an explanation as to the reasons for the proposed change and how the proposed change will achieve the same or a better result in relation to the maintenance of the Vehicles or the EMU Depot Plant and Equipment	The reasons are outlined in the former section of this proposal (Reason for the proposed Contract Variation)		
a signed statement from Transdev (in accordance with the requirements a paragraph 17.2.3 of Schedule 4)	Please refer to Attachment 3		
be accompanied by any consultant's reports or internal reports prepared in relation to the proposed change	Not applicable		
be accompanied by written confirmation from the relevant supplier or manufacturer (as required by paragraph 17.2.5 Schedule 4)	Not applicable		

If the Contract Variation includes any change to the Matangi Fleet Maintenance Plan, the Carriage Fleet Maintenance Plan, the EMU Depot and Equipment Manual or the Electric Shunt Manual (including any proposed change to a requirement contained therein or any change to any Spares, Rotable Items, Special Tools, General Tools or EMU Depot Plant and Equipment referred to in such documents) include:

- full details about the proposed change , including drafting changes
- an explanation as to the reasons for the proposed change and how the proposed change will achieve the same or a better result in relation to the maintenance of the Vehicles or the EMU Depot Plant and Equipment
- a signed statement from the Operator (in accordance with the requirements a paragraph 17.2.3 of Schedule 4)
- be accompanied by any consultant's reports or internal reports prepared in relation to the proposed change
- be accompanied by written confirmation from the relevant supplier or manufacturer (as required by paragraph 17.2.5 Schedule 4)

The value for money for GWRC arising from the proposed Contract Variation	A saving in the cost of Vehicle Services
Any additional information requested by GWRC in connection with the proposed Contract Variation	All relevant supporting documents are provided as attachments to this Variation Proposal.
Signature of Operator Authorised Representative	Name: Position: Operator Authorised Representative Date:

Approved Variation Order – complete Part C below

	Part C rm of approved Variation Order Operator by GWRC and GWRL (if variation relates to assets owned by GWRL)
This Variation Order relates to	An Operator initiated Contract Variation (as set out in the above table)
Estimate of Net Financial Impact arising from the proposed Contract Variation	
Any change to the Service Fee or Payment Schedule Refer paragraph 6.26 Schedule 16	
Time frame within which the proposed Contract Variation will be implemented	Subject to the issue of approved Variation Order by GWRC
Any conditions attached to the Contract Variation	Nil
Notice to proceed	GWRC by completing and issuing this Variation Order to Transdev directs Transdev to implement this Contract Variation in the timeframe set out above.
Signatures of GWRC and GWRL Authorised Representatives	(Signature) Name: Fiona Abbott Position: GWRC Authorised Representative Date:

Partnering Contract PT0416	CONFIDENTIAL	Variation 12
	(Signatur Name: Fiona Abbott Position: GWRL Authorised Represer Date:	·

Summary of Attachments (if any) referred to in this Contract Variation:

Attachment 1. ECR (F)-M-686 Define the Carriage Depot Check interval limits

Attachment 2. Carriage Fleet Maintenance Plan - including proposed changes

Attachment 3. Statement of Compliance (to satisfy requirement at paragraph 17.2.3, Schedule 4)



Signed on behalf of Transdev:

Transdev Proposed Contract Variation - Statement of Compliance

Transdev Initiated Contract Variation Number: PT0416 Variation 12 Title: Proposal to change in O&M Manuals as part of the Carriage Fleet Maintenance Plan Brief Description: Variation requires changes to technical document as below 1. Convert Loco 652 to task instruction Vol 3B S1-2.1 Carriage Daily Maintenance Check. 2. Convert Loco 651 to Vol 3A 2.1 S1-2.1 Carriage Maintenance Record Sheet 3. In ROLST-10-24 and Loco 651 clarify when a check is required as below: - A Daily check is required to be carried out on all consists that are stabled in the Wellington Carriage Depot or Yard during normal weekday hours. The maximum interval between checks is 1500km at which point it must be carried out irrelevant of the vehicle location. Statement of compliance: According to PT0416 Schedule 4 17.2.3, Transdev Wellington Limited (Transdev) gives assurance that the proposed Contract Variation: (a) complies with the Approved Engineering Process; and (b) will not have a material adverse effect on Transdev's ability to: (i) achieve the Vehicle Services Objectives and Outcomes or the Vehicle Use in Service Outputs: (ii) ensure the Vehicles meet the Hand Back Standards; (iii) comply with its obligations under this Partnering contract (PT0416): (iv) meet the requirements of the Reliability KPI and the Punctuality KPI; or (vi) achieve the PI Achieve Benchmarks applying to the Performance Indicators: (c) will not have a material adverse impact on the condition, value, or whole of life cost of the Vehicles or the EMU Depot Plant and Equipment or on any of their safe or lawful operation. Name: Date:

Transde	v Wellington Limited	Title: Contract Variati	on Statement of
Date:	Doc.No: PT0416 Variation	Title: Contract Variation Statement Compliance	
Revision: 1.0	UNCONTROLLED	WHEN PRINTED	Page 1 of 1

Approved by:

ENGINEERING CHANGE FORM



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			Reference	e Informa	tion		
Subject	Define th	e Carriage Daily chec		Co. B. IN SHALL SEL	Priority		□A □B ⊠C
Change Ty		nt-only Change (No	☐ Trial?				
ECP No. ECP(F)-C-228-10		Rev. No.	1	Submission D	ate	N/A	
ECR No.	ECR(F)-I	M-686	Rev. No.	1	Submission D	ate	14/05/2019
Origin	Change	Suggestion	Reference	CS142			
Submitter	Hamish \	N.					
Assets □M1		□M2		SW	⊠SE		□AG
affected	⊠Mainte	☑Maintenance Documents ☐Depot Plant and Equipment					
			Change	Description	on		
Reason for Change	Description	resulted in HR not of contractual docume. The requested chaweekend running of the convert to the convert to the contractual document to the convert to the	arity around data ail to clarify the daily to km bas complying with entation to make ange from "Dailed in the Well terval between a location. S01-000 Carriaterm from "Dailed in the communicaterm from "Dailed in the communicaterm from "Dailed in the communicaterm from "Dailed on the communicaterm from "Dailed o	illy check received and sed inspect and contractured the current was the current and the AG very selection to "Depart to	requirements and E d change to a km b tions was not include all check intervals. The continuation of the c	CR TS1038 was passed interval. ded in the new This ECP is intercompliant. ,500km maximum was introduced ecord Sheet"	contract which has ended to amend the um limit) is to allow for lin 2016.
	Category	□ Design Change □ Material Change	□Pr	rocess Imp upplier Ch	orovement ange	□Maintenand	e Optimisation nce Management
Reference I (Reports, Previous Investigatio	Standards, ECP's,	1. ECSS Define the 3. Vol 3A 2.1 S1-2.1 3. S01-000 Carriage 4. ROLST-10-24 Ca	1 Carriage Mai e Depot Check	intenance «	Record Sheet		
	Title: Eng	ineering Change	Form		Revision: 1.0		Date: 23/08/2019

UNCONTROLLED WHEN PRINTED

HR-DPT-QF3056

ENGINEERING CHANGE FORM



	Change Impacts	ECR Close
Cost Impact	□ No cost □ Maintainer cost □ University □ Operator cost □ GW cost □ Value □ Operator cost □	
	Detail/ References: Variation detail and cost to be discussed and agreeded (\$)	
Contract Impact	Variation Required	
Other impacts	□Reliability □Maintainability □Driver Simulator □Specification □Performance □Software/Escrow Detail/ References: N/A	Not completed
Safety Updates	□ FMECA □ Risk Register □ Safety System Detail/ References: N/A	Not completed
Human Factors	□ Crew impact □ Passenger Impact □ Maintainer Impact □ Detail/ References: N/A	Not completed
Rail vehicles	⊠Fleet Vehicle # Carriage	Not
Inventory/ Spares	□ Require modification □ Disposal □ Replacement/requisition Detail/ References: Inventory Stock Supplied at HR expense	Not completed
Impacted Documents	□ Matangi Technical Manual □ Matangi Train Crew Manual □ Matangi Maintenance Manual □ Matangi Diagnostics and Fault Findling □ Matangi Illustrated Parts Catalog □ Depot Plant and Equipment Manual □ SW Carriage Manual □ SE Carriage Manual □ Star Ghart □ Check List	Not completed
	As Built Drawi ng	Not completed

Title: Engineering Change Form		Revision: 1.0	Date: 23/08/2019
Approved by:			
	UNCONTROLLED WHEN P	RINTED	Page: 2/4

HR-DPT-QF3056

ENGINEERING CHANGE FORM



		Referen	ce Informa	ation	
Subject	Dfine the Carriage Daily check	interval limits		Priority	□A □B ⊠C
Change Type	Document-only Change (No ECP)	☐ Trial?			
ECP No.	ECP(F)-C-228-10	Rev. No.	1	Submission Date	N/A
ECR No.	ECR(F)-M-686	Rev. No.	1	Submission Date	14/05/2019

Change Authority

Date	Name Figure ering Change	TDW
Date	Engineering Chang	
Date	Engineering Chang	TDW GWRC
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		H-Rotem
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Title: Engineering Change Form		Revision: 1.0	Date: 23/08/2019
Approved by:			
	Page: 3/4		

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ENGINEERING CHANGE FORM



Submission Checklist

		Document-only Change	ly Change	Change of Supplier only	ler only	Hardware Change	Software Change
-	Completed Form	•		٠		٠	•
T	Change Suggestion Form	0		0		0	0
0	FRACAS Report				Antelographic Control of the Control	0	0
	Technical Description/Specification					•	•
	Operation and Maintenance Manuals	•	*		£ 3,	•	<u>.</u>
	As built drawings	0				0	
110	Trial Plan					•	•
	Modification instructions/ FMI					•	0
2	Fleet Modification Plan					•	•
	Inventory Management Plan			0		•	0
	Software Revision History						•
	Software Release Certificate						•
1		Mandatory	o As Required	F = Fleet	T = Trial		

Date: 23/08/2019 Page: 4/4 Revision: 1.0 UNCONTROLLED WHEN PRINTED Title: Engineering Change Form Approved by:

ENGINEERING CHANGE FORM



			0.6	1.00	A		
Subject	Define th	ie Carriage Daily check		ce Informatio			
Change Ty	pe Documer	nt-only Change (No	☐ Trial?	8	Priority		□A □B ⊠C
ECP No.	ECP)	2-228-10	Rev. No.	1	Submission Da	la.	NIZA
ECR No.	ECR(F)-I		Rev. No.	1	Submission Da		N/A 14/05/2019
Origin		Suggestion	Reference	CS142	Submission Da	ie	14/05/2019
Submitter	Hamish V		Reference	03142			
Assets	□M1	□M2	N	3SW	⊠SE		□AG
affected		nance Documents			t and Equipment		LAG
			Change	e Description	(V		
Reason for Change	Description	b. Change the ter c. Include the fol that are stable	in Wellington ty around da to clarify the ily to km bas mplying with tation to mak ge from "Dai a consist with I.3A 2.1 S1- rm from "Dai llowing come d in the Wel rval between ocation. 1-000 Carria rm from "Dai on the come	n. In 2015 at aily check rece check and sed inspection contractual ke the current with the AG variable. It is a check in the AG variable. It i	ter the bid docume quirements and EC change to a km bath ons was not include theck intervals. The Daily interval control of the Maintenance Rect of th	entation was super RTS1038 was sed interval. ed in the new conis ECP is intendent in the new conis ECP is intendent. 600km maximum as introduced in ord Sheet" ed to be carried during normal	oplied, KiwiRail submitted and intract which has ded to amend the ilimit) is to allow for 2016.
	Category	□ Design Change □ Material Change	□Pr	perator Requ rocess Impro upplier Chan	ovement	⊒Network Requ ⊒Maintenance (⊒Obsolescence	Optimisation
Reference I (Reports, Previous Investigation	Standards, ECP's,	1. ECSS Define the C 3. Vol 3A 2.1 S1-2.1 C 3. S01-000 Carriage D 4. ROLST-10-24 Carri	Carriage Mai Depot Check	intenance Re	ecord Sheet		
		ineering Change Fo	orm	Re	evision: 1.0	Da	te: 23/08/2019
Approv	ed by:						
		UNCONTROLLED	WHEN P	RINTED			Page: 1/4

Carriage Fleet Maintenance Plan

Amendment Description

Issued at commence

1	Issued at commencement of contract	GWRC
2	Define the Carriage Daily check interval limits	H. Walker
_	<u>1</u> <u>2</u>	

The below outlines the SE and SW carriage fleet maintenance sessions, these have been reviewed and refined to maximise availability and reliability whist minimising maintenance costs.

Carriage maintenance plan

The below outlines the SE and SW carriage fleet maintenance sessions, these have been reviewed and refined to maximise availability and reliability whist minimising maintenance costs.

The hours reflected are from current experience.

		Interval		Recourse		
Classification	Time Mileag (month) (kms)		Maximum tolerance	Time (man hrs)	Location	
Routine Maintenance						
Daily Depot	Daily When	at depot	1,500km	0.75	Depot or Yard	
Servicing	DailyAs req.			0.75	Fuel Bay and Yard	
'A' check		12,000	+2,000	4	Depot, Pit access	
'B' check	1000	24,000	+2,000	6	Depot, Pit access	
'C' check	12		+2 Months	18	Depot, Pit access	
Electrical Warrant of fitness	Yearly		+2 Months	6	Depot	
Generator (SWG & SEG & AG222)	Tims (hrs)			1 1		
Gen 1	450	N. C.	+50 Hours		Depot	
Gen 2	1800		+200 Hours	The state of the s	Depot	
Heavy maintenance		Mileage (kkms)	Marine Marine	- 15		
'D1' Check	H E I E	300-400	1811	16	Depot, Pit access	
(1/2 wheel life)		Hilliand March	A-00			
'D2' Check (full wheel life)	A	600-800	05/2		Depot, Lift, Pit access	
'D3' Generator	25,000hrs		+5,000hrs	10 -01 -01	Depot, forklift Pit	
Replacement	25,000nrs		+5,000nrs		access	

Carriage cleaning requirements as laid out in the Carriage cleaning plan are part of the carriage maintenance plan.

In addition to the specified checks refuelling of generator cars, discharging toilet waste water tanks and refilling of potable water are also required tasks.

The check intervals are the same for both the SE and SW fleets, the current utilisation of carriages gives us the following KM run and hence dictates the frequency of the related check per fleet; it also identifies typical generator running hours.

Carriage Type	Approx. current annual KM's run	Approx. current annual Hours run
0144		Hours run
SW	65,000	
SE	102,000	
AG222	53,000	O DOMESTIC OF THE STATE OF THE
SE Generators	district the second	2850
SW Generators		2000
AG222 Generator		1300

Above figures based on actuals from December 13 to December 14

Below is a brief summary of the content and function of both routine and heavy maintenance applicable to the GW carriage fleet, for detailed information on content and periodicity refer the maintenance documentation.

Daily Depot Checks

The daily <u>Depot</u> check is a non-evasive invasive inspection of the carriages before passenger service; it includes condition, security and functionality of essential systems on the carriages.

It also includes the daily requirements for the generator sets and instructions for checks to be carried out in the case of a consist change.

A Depot check is required to be carried out on all consists that are stabled in the Wellington Carriage depot or Yard during normal weekday hours. The maximum interval between checks is 1,500km at which point it must be carried out irrelevant of the vehicle location.

Servicing

Servicing includes refueling of generator cars, discharging toilet waste water tanks and refilling of potable water and are carried out as required.

A & B Checks

The 'A' & 'B' checks are carried out on a 12,000km rotation. They are made up of inspections, functional tests and a lubrication regime. The purpose of these checks is to ensure the safety, functionality and condition of the carriages at regular intervals.

There is a maximum tolerance of 2,000km to carry out A and B checks.

Accumulated running distance	A	В	А	В	А
(km)	12,000	24,000	36,000	48,000	60,000

C Checks

The 'C check' is carried out annually on all carriages, it covers much of the same as the A & B checks but also includes 12 monthly servicing as specified by the OEM's for specific components.

There is a Maximum of 2 months tolerance to carry out C checks.

Electrical warrant of Fitness

The electrical warrant of fitness is an annual certification of the electrical compliance of the carriages. This check is independent of other checks.

Generator

The carriage generators are considered to be of high criticality to the ability of the carriages to provide the scheduled services, to achieve the required reliability level the checks have been based around the OEM recommendations. These are carried out on operating hours of the generator.

Carriage Heavy Maintenance

Heavy maintenance on the carriages is scheduled to coincide with half and full wheel life. The general content of heavy maintenance checks is the same for both SW and SE carriages with difference being at component or assembly level.

Heavy Maintenance

Refer to the SE and SW maintenance documentation for detail on check content.

D1 Checks

D1 checks are carried out at the ½ life of wheel sets.

D2 Checks

Carried out at 600 - 800kkm estimated full wheel life, it includes bogie overhaul.

The generators are to be replaced at 2S,000-30,000 operating hours

Cleaning

Cleaning of both the interior and exterior of the carriages is required in accordance with the carriage cleaning plan.

See cleaning plan

APPENDICES

Carriage maintenance documentation as indicated in below list

Maintenance documentation	The second secon		tation version	
Carriage Fleet Maintenance Plan	ROLST-10	0-24	Issue 1	
Check classification	SW carriage	Revision	SE carriage	Revisio
A Check	Loco 482A	Α	Loco 557	5
B Check	Loco 482B	Α	Loco 558	5
C Check	Loco 482C	Α	Loco 559	5
DailyDepot Check	Loco 651 & 652 000	1	Loco 556 <u>501-00</u>	4
Servicing	Loco 651 & 652	2	Loco 556	4
Electrical warrant of fitness	M9377	2	M9377	2
Generator servicing	Loco 441	6	Loco 441	6
D1 Check	D1	1	D1	1
D2 Check	D2	1	D2	1
	Docume	nt Number	Revision/Is	sue
SW & SE Coolzone HVAC system, commissioning, testing and maintenance instructions.	M9354		9	
SW Bogie Manual	M9311		4	
SW Bogie structural and general inspection	M9363		2	
SE S-Ride bogie Maintenance manual CRC CW720	M9396-00		3	
SE S-RideMounting and inspection of SKF Bearing unit Maintenance Manual	M9396-01		3	
SE S-Ride XPD 12XXL Tread Brake Unit Operating manual	M9396-02	n, i	2	
SE S-Ride XPD 12XXL Tread Brake Unit Maintenance mnaual	M9396-03		2	
SE S-Ride Damper Maintenance Manual	M9396-04		2	
SE S-Ride Bogie Leveling Valve Maintenance manual	M9396-05		2	
SE S-Ride Bogie Presure differential Valve Maintenance manual	M9396-06		2	
SE S-Ride Bogie Torsion Bar Maintennace manual	M9396-07	44	2	
SE S-Ride Bogie Air spring Maintenance Manual	M9396-08		2	
SE S-Ride Bogie Primary spring Maintenance Manual	M9396-09		2	
SW & SE Train Door inspection & Test procedure5	M9378			
PID software user Manual	M9391		1	
Toilet unit manual	M93128		1	
SES disabled access toilet door power unit OEM manual.	M93154		1	
Ricon S-Series Wheelchair and standee lift operator Manufacturers documents	Loco 561	Loco 561		
Inspection, Test and setup procedure for Buckeye coupler	M9381	M9381		
Drop head Buckeye coupler overhaul	M9385	M9385		
Generating Set Operators Manual	PWP01 - GB	PWP01 - GB		05
Genertaing Set Technical Operation and Maintenance Manual	PWTM1 - GB	PWTM1 - GB		05
Perkins 1300 Series Edi	TPD 1352			
SW Brakes	M9352 & M930	M9352 & M9305		
SE Brake code for S-Ride bogies	M9393		5	
Faiveley Type AL2B maintenance manual	Loco 560	Loco 560		
SE Bogie setup and car levelling procedure	M93142	M93142		
SW & SE Train Management System commissioning and test manual	M9379	M9379		
SW & SE CCTV Manual	M9380		3	
SW Operational Manual	M9383		2	
SE Operational Manual	M9398		2	
GWRL carriage cleaning plan	ROLST-10-28		A	

Soft Copies of the manuals will be supplied on CD with the contract.

Date: 2/06/2017

Revision: 1.1

Hyundai-Rotem Company

Doc.No: HR-DPT-QF3057

Informal Engineering Change Proposal Submission Sheet (ECPSS)



Title: Informal Engineering Change Proposal Submission Sheet (ECPSS)

Page **1** of **2**

	Pa	rt 1	Γ		
Actual Date Out	Description		Outcome R/NR/SC	Responsible Manager Signature	Project Director or Delegates Signature
	Revision of BFM Overhaul Interval		NR NR NR NR NR NR	BY Han. Tim D. NR 11/6/19 Bryce R. Geoff W. Alex K. David M. GWRC	
			_egend		
		F		Rejected	
			NR	Not Rejected	anges
		9	SC	Not Rejected Subject to Ch	anges

UNCONTROLLED WHEN PRINTED

Informal Engineering Change Proposal Submission Sheet (ECPSS)



Item No.:	Section/P age/Drg:	Comments:	Ву:	Response details to be filled out by HR
			Part 2	
1		Can you please revise star chart, Check sheet, Manual?	ВН	The document changes will be done during ECR stage. This ECP does not require changes to task instructions/IPC or any other technical details concerning Brake Frame Modules which need to be reviewed by everyone. If this ECP gets approved, changes to overhaul interval in star-chart, check-sheets and manuals will be presented with ECR.
2				
3				
4				
5				
			Part 3	
Outcon	ne	Rejected	Not	Rejected Not Rejected Subject to Changes

Hyundai-Rotem Company		Title: Informal Engineering Change Proposal Su	amigaian Chast (ECDCC)	
Date: 2/06/2017 Doc.No: HR-DPT-QF3057		Title: Informal Engineering Change Proposal Submission Sheet (E		
Revision: 1.1	UNCONTROLLED	WHEN PRINTED	Page 2 of 2	





Matangi Brake Module Major Components Conditional Assessment

Document Type: Report

ECO/ECO: N/A

Compiled/Rédigé: A.Guzzardi / I. Khan

Checked/Vérifié: M. Mussa Approved/Approuvé: D. Dolzadelli

Date: 14/02/2019 - Revision: A00
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/// 1. HEALTH and SAFETY

The following points must be considered and appropriate precautions taken when working on compressed air equipment. It should not be taken as an exclusive list of hazards:



Caution! Prior to commencing any work, ensure that the local site/depot procedures regarding access and working on the vehicle are followed



Caution! Electric equipment! Prior to accessing to electric parts, make sure the power is duly switched off.



Caution! Pressurised system! Discharge the pressure before removal of equipment.



Caution! Pressurised system! When removing test point connections or pneumatic connections, discharge the pressure before removal.



Caution! Oils and greases are used which could be a hazard.



Caution! Beware of any moving components during testing which could cause injury.



Important! Protect eyes and hands with suitable glasses and gloves.



/// 2. INTRODUCTION

2.1 PURPOSE

This report summarises the conditional assessment on selected components fitted to the Matangi Brake Modules. These components are installed inside the brake modules and relatively protected from external environment.





Brake Module and Internal Components

The selected components were removed from train sets that entered service during the first year of the service introduction of the Matangi EMU fleet. The assessment took the form of functional testing and visual inspection of the sub-components as described in this document.

Note that components such as solenoid valves were not checked internally as they are encapsulated and would result in the destruction of the component.

In general components that were deemed suspect to be damaged by a more detailed strip down, were not checked as the intent was not to carry out destructive testing/inspection.

2.2 BACKGROUND

The brake modules fitted to the Matangi EMU stage 1 fleet are close to the recommended overhaul period and in order to determine the state of the main components associated with the brake control functions (i.e. IRV, NJMR Distributor and Lpp valves) were selected for internal assessment.

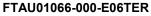
2.3 SCOPE

A subsequent assessment was carried out by Faiveley Transport to determine if there were any areas of concern with the inspected valves.

2.3.1 Assessed Components History

The following table summarised the components and the operational history of the train sets to which these components were fitted:

Item	Description	Part. No.	Serial No.	Unit No.	Date in Service	Km Travelled
1	IRV (Integrated Relay Valve) - MC	1/448230	001	4368	26/08/2011	561,847
2	IRV (Integrated Relay Valve) - TC	1/448231	014	4300	20/00/2011	301,047
3	NJMR (Distributor)	7288350408	005			
4	NJMR (Distributor)	7288350408	035	4351 16/08/2011		E00.006
5	LPP (Load proportional valve)	1/121475	0030	4331	16/08/2011	590,986
6	LPP (Load proportional valve)	1/121476	0036			



Date: 14/02/2019 - Revision: A00



/// 3. COMPONENT ASSESSMENT

3.1 Pre-Strip Down Inspection

The following was determined for the Matangi Brake Module componentry consisting of IRV (Integrated Relay Valve), Lpp valves and NJMR (Distributor) with serial numbers as shown below:

3.1.1 NJMR Valves – Pre-Strip Down Inspection

The NJMR Distributors were visually inspected and no apparent external physical damage to the units was noted, as seen in Figure 1 below:





SN: 005 SN: 035

Figure 1 – Depicting NJMR – Spring Reference Distributors

3.1.2 IRV's - Pre-Strip Down Inspection

The IRV's (Integrated Relay Valves) were visually inspected and no apparent external physical damage to the units was noted, as seen in Figure 2 below:





SN: 001 SN: 014

Figure 2 – Depicting IRV's (Integrated Relay Valves)



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3.1.3 Lpp Valves – Pre-Strip Down Inspection

The Lpp Valves were visually inspected and no apparent external physical damage to the units was noted, as seen in Figure 3 below:





SN: 030 SN: 036

Figure 2 - Depicting Lpp Valves

3.2 Functional Testing

The functional testing was carried out using FT's Matangi EMU system integration test bench. The system integration test bench is configured to be electrically and pneumatically as functionally representative to the train as possible as shown below:



System Integration Test Bench

The selected components were installed to the brake module and functionally tested.

Testing of all the components was successfully completed with results correlated and presented below:



3.2.1.1 NJMR - SN: 005

Brake Pipe	Bogi	ie 1	Bog	jie 2
Pressure (kPa)	TPDIS (kPa)	BCP (kPa)	TPDIS (kPa)	BCP (kPa)
540	0	0	0	0
486	98.3	96	98	97
478	125	125	124.6	123
467	161.7	160	161.8	162
455	207	206	208	207

TPDIS: Test Point Distributor on the IRV.

• BCP: Output of relay valve

3.2.1.2 NJMR - SN: 0035

Brake Pipe	Bogi	ie 1	Bogie 2		
Pressure (kPa)	TPDIS (kPa)	BCP (kPa)	TPDIS (kPa)	BCP (kPa)	
545	0	0	0	0	
485	128	132	127	131	
477	157	160	155	159	
466	197	198	196	196	
455	222	221	232	235	

• TPDIS: Test Point Distributor on the IRV.

• BCP: Output of relay valve

3.2.1.3 IRV – TPII and Relay Valve 1st Chamber (Service) Output

Bogie 1 (1/448230: S.N. 001)			Bogie 2 (1/448231: S.N. 014)			
Digital Gauge (kPa)	Control Trans. (kPa)	BCP (kPa)	Digital Gauge (kPa)	Control Trans.	BCP (kPa)	
0	0	0	0	0	0	
50	49	49	50	48.7	48	
100	100	100	100	98.2	100	
150	150	152	150	149	151	
200	200	201	200	199	202	
300	299	303	300	298	302	
350	348	349	355	354	356	

• TPDIS: Test Point Distributor on the IRV.

BCP: Output of relay valve

• **TPpil:** Test Point Pilot Pressure



3.2.1.4 IRV Load Transducer

Digital Gauge	Bogie 1 (1/448230: S.N. 001)
(kPa)	Load Trans. (kPa
0	0
104	105
202	202
298	297
398	397
497	497
602	601
701	702

Bogie 2 (1/448231: S.N. 014)				
Load Trans. (kPa				
0				
103				
199				
296				
396				
496				
601				
701				

3.2.1.5 IRV - AUXILIARY RESERVOIR TRANSDUCER

Bogie 1 (1/448230: S.N. 001)				
Digital Gauge (kPa)	AR Trans. (kPa)			
0	0			
287	286			
467	465			
483	482			
585	583			
714	712			
863	862			
917	915			

Bogie 2 (1/448231: S.N. 014)					
Digital Gauge (kPa)	AR Trans. (kPa)				
0	0				
217	218				
323	320				
470	470				
587	588				
695	698				
814	816				
932	935				



3.3 Strip Down - NJMR Distributors

Strip down of the NJMR – Spring Reference Distributors was undertaken whereby the distributors were examined and noted as per the below Figures 4 and 5:

3.3.1 NJMR: PN: 728835040; SN: 005



Figure 4 - Depicting Strip Down of NJMR - Spring Reference Distributor SN. 005



Figure 5 – Depicting Strip Down of NJMR – Spring Reference Distributor SN. 035

3.4 Strip Down – IRV's (Integrated Relay Valve)

Strip down of the IRV (Integrated Relay Valve) was undertaken whereby the IRV's were examined and noted as per the below Figures 6 and 7

3.4.1 IRV: PN: 1/448230; SN: 001













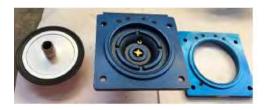


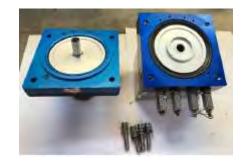
Figure 6 - Depicting Strip Down of IRV - SN: 001

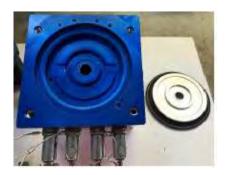












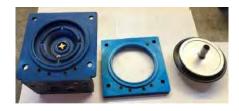


Figure 7 – Depicting Strip Down of IRV – SN: 014

3.5 Strip Down - Lpp Valves

Strip down of the Lpp Valves was undertaken whereby the Valves were examined and noted as per the below Figures 8 and 9:

3.5.1 Lpp: PN: 1/121475; SN: 0030



Figure 8 - Depicting Strip Down of Lpp - SN: 0030





Figure 9 – Depicting Strip Down of Lpp – SN: 0036

3.6 Post Strip Down Observations

- a) Review of the NJMR components as shown in Figures 4 and 5, indicates no significant visible damage or anything unusual found on both examined NJMR (Distributors). There is some slight indications of possible dirt ingress and general normal operational wear and tear.
- b) Review of the IRV's as shown in Figures 6 and 7, indicates no visible damage or anything unusual found on both examined IRV's (Integrated Relay Valves). This is apart from visible evidence of normal operational wear and tear.

 Note that the components fitted to the electronic board (i.e. transducers) and the solenoid valves were only visually checked and found to be in good and clean condition (functional tests carried out as per section 3.2.
- c) Review of the Lpp valves as shown in Figures 8 and 9, indicates no significant visible damage or anything unusual found on both examined Lpp Valves. There is some slight indications of possible dirt ingress and general normal operational wear and tear.

/// 4. COMMENTS and CONCLUSIONS

The following summarises the main observations for the 3 types of valves noted in this report:

IRV:

The load and pilot/control transducers functioned correctly and processed the pressure very closely.

The Service brake relay responded and tracked the input pressure closely.

The Auto/ Back-Up brake relay responded and tracked the input pressure closely.

No Leaks or functional anomalies were noted.

Considering the service period since introduction, the internals of the valves were visually found to be in a clean and reasonably good condition.

NJMR & Lpp Valves:

The NJMR and Lpp valves were checked part of the Auto/Back-Up brake function.

The function operated within expected tolerances for Back-Up brake functions (±25kPa).

Strip down of the valves did not show any significant anomalies. Slight indications of possible dirt ingress and normal wear and tear were noted.

No Leaks or functional anomalies were noted.

Considering the service/operational age of the components, described inspection and testing of the valves did not show any significant functional degradation. The internal components were also visually found to be in good condition.

/// 5. RECOMMENDATIONS

Based on the observations noted in this report, these valves functioned correctly and there were no signs of significant degradation and therefore these valves should continue to operate.

It is recommended that during the vehicle routine maintenance activities, as a precaution, closer attention should be payed for leaks or other deviations to the normal functions of the equipment to determine if this may indicate a rise in the functional degradation due to extended operational period.

It must be noted although the valves examined in this report did not show and significant degradation considering their introduction in 2011 and they should continue to operate, rubber and other components (i.e. diaphragms, springs, seals, solenoid valves, etc) can wear/degrade over time and must be suitably replaced by carrying out a major overhaul of the components.







Matangi Brake Module Conditional Assessment

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/// 1. HEALTH and SAFETY

The following points must be considered and appropriate precautions taken when working on compressed air equipment. It should not be taken as an exclusive list of hazards:



Caution! Prior to commencing any work, ensure that the local site/depot procedures regarding access and working on the vehicle are followed.



Caution! Electric equipment! Prior to accessing to electric parts, make sure the power is duly switched off.



Caution! Pressurised system! Discharge the pressure before removal of equipment.



Caution! Pressurised system! When removing test point connections or pneumatic connections, discharge the pressure before removal.



Caution! Oils and greases are used which could be a hazard.



Caution! Beware of any moving components during testing which could cause injury.



Important! Protect eyes and hands with suitable glasses and gloves.



/// 2. INTRODUCTION

2.1 PURPOSE

This report summarises the conditional assessment on selected components fitted to the Matangi Brake Modules. These components are installed inside the brake modules and relatively protected from external environment.





Brake Module and Internal Components

The selected components were removed from brake modules fitted to trainsets that entered service during the first year of the service introduction of the Matangi EMU fleet.

The assessment took the form of functional testing and visual inspection of the sub-components as described in this document.

2.2 BACKGROUND

The brake modules fitted to the Matangi EMU stage 1 fleet are close to the recommended overhaul period and in order to determine the state of some the main components associated with the brake control functions (i.e. Check Valves, Emergency Application Valves and Pressure Reducing Valves) were selected for internal assessment.

2.3 SCOPE

A subsequent assessment was carried out by Faiveley Transport to determine if there were any areas of concern with the inspected valves.



2.3.1 Assessed Components History

The following table summarises the components and the operational history of the train sets to which these components/Brake Modules were fitted:

Component Serial Number	Description	Part Number	Quantity	Build Date	Est Km's Travelled
BRAKE MODULE			8/09	560,000	
3972	Check Valve	1/118190	1		
4001	Check Valve	1/118190	1		
57	Emergency Application Valve	1/431169	1		
641	Pressure Reducing Valve	1/122270	1		
BRAKE MODULE	TRAILER CAR 2 – S.No.: 48			11/09	560,000
4207	Check Valve	1/118190	1		
4188	Check Valve	1/118190	1		
87	Emergency Application Valve	1/431169	1		
654	Pressure Reducing Valve	1/122270	1		
BRAKE MODULE			11/09	560,000	
4180	Check Valve	1/118190	1		
4206	Check Valve	1/118190	1		
92	Emergency Application Valve	1/431169	1		
656	Pressure Reducing Valve	1/122270	1		
BRAKE MODULE			10/09	560,000	
4163	Check Valve	1/118190	1		
4164	Check Valve	1/118190	1		
82	Emergency Application Valve	1/431169	1		

Note: Estimated kilometres shown are based on build date of the Brake Modules and assuming an entry service date of 2011.

/// 3. COMPONENT ASSESSMENT

3.1 Pre-Strip Down Inspection

The following was determined for the Matangi Brake Module componentry consisting of Check Valves, Emergency Application Valves and Pressure Reducing Valves with serial numbers as shown below:

3.1.1 Check Valves – Pre-Strip Down Inspection

The Check Valves were visually inspected and no apparent external physical damage to the units was noted, as seen in Figure 1 below:



NP: 3972



NP: 4001



NP: 4207



NP: 4188



NP: 4180



NP: 4206



NP: 4163



NP: 4164

Figure 1 - Depicting Check Valves

The Emergency Application Valves were visually inspected and no apparent external physical damage to the units was noted, as seen in Figure 2 below:





SN: 57 SN: 87





SN: 92 SN: 82

Figure 2 - Depicting Emergency Application Valves

The Pressure Reducing Valves were visually inspected and no apparent external physical damage to the units was noted, as seen in Figure 3 below:





SN: 641 SN: 654



SN: 656

Figure 3 - Depicting Pressure Reducing Valves

3.2 Functional Testing

All above mentioned components were pneumatically connected and functionally tested. Testing of all the components was successfully completed with results correlated and presented below:



		(Check Valv	e (Brake Modu	le Trailer Car	- 1)					
Part Number	Sr No.	Inlet Pres s (kPa)	Outlet Press (kPa)	Outlet Valve (Input Press) (kPa)	Inlet Valve (Output Press) (kPa)	Min Opening Pressure (kPa)	Comments				
		200	193	200	0						
1/118190	3972	500	490	500	0	45					
	(7-09)	750	741	750	0	15					
		950	940	950	0						
Check Valve (Brake Module Trailer Car - 1)											
Part Number	Sr No.	Inlet Pres s (kPa)	Outlet Press (kPa)	Outlet Valve (Input Press) (kPa)	Inlet Valve (Output Press) (kPa)	Min Opening Pressure (kPa)	Comments				
		200	185	200	0						
1/118190	4001	500	485	500	0	15					
	(7-09)	750	736	750	0	15					
		950	936	950	0						
	E	mergen	cy Applica	tion Valve (Bra	ke Module Tra	ailer Car - 1)					
Dout	O:: No										
Part Number	Sr No.			Step		Expected Result	Noted Result				
	Sr No.	Energis	se/De-ener	Step gize Coil 3 times			Noted Result				
	57	Energiz kPa ±1	ze the Coil, 0 kPa and		set at 500 at 'M' = 500	Result					
Number		Energiz kPa ±1 kPa ±1	ze the Coil, 0 kPa and 0 kPa (Wai 0 minutes, o	gize Coil 3 times Open Cock 'R's check Pressure	set at 500 at 'M' = 500 o settle)	Result	√				
Number	57	Energiz kPa ±1 kPa ±1 After 10 (0-5 kF	ze the Coil, 0 kPa and 0 kPa (Wai 0 minutes, o	gize Coil 3 times Open Cock 'R' s check Pressure t for 5 minutes t	set at 500 at 'M' = 500 o settle) essure drop	Result √ M = 500 kPa ±10 kPa M = 500 kPa ±10 kPa	√ 500 500				
Number	57	Energiz kPa ±1 kPa ±1 After 1 (0-5 kP	ze the Coil, 0 kPa and o 0 kPa (Wai 0 minutes, o Pa) ergize the C	gize Coil 3 times Open Cock 'R' s check Pressure t for 5 minutes to	set at 500 at 'M' = 500 o settle) essure drop 'S' = 0 kPa	Result √ M = 500 kPa ±10 kPa M = 500 kPa ±10 kPa 0-5 kPa S = 0 kPa	√ 500 500 (0 kPa Drop)				
Number	57	Energiz kPa ±1 kPa ±1 After 1 (0-5 kP	ze the Coil, 0 kPa and 0 0 kPa (Wai 0 minutes, 0 Pa) ergize the C	gize Coil 3 times Open Cock 'R' s check Pressure t for 5 minutes to check for any pr Coil, Pressure at	set at 500 at 'M' = 500 o settle) essure drop 'S' = 0 kPa	Result √ M = 500 kPa ±10 kPa M = 500 kPa ±10 kPa 0-5 kPa S = 0 kPa	√ 500 500 (0 kPa Drop) 0				
1/431169 Part	57 (7-09)	Energiz kPa ±1 kPa ±1 After 1 (0-5 kP	ze the Coil, 0 kPa and 0 0 kPa (Wai 0 minutes, 0 Pa) ergize the C	Open Cock 'R' scheck Pressure t for 5 minutes to check for any precioil, Pressure at ucing Valve (But Supply Press	set at 500 at 'M' = 500 o settle) essure drop 'S' = 0 kPa	Result M = 500 kPa ±10 kPa M = 500 kPa ±10 kPa 0- 5 kPa S = 0 kPa Trailer Car - 1) Outlet Regu	500 500 (0 kPa Drop) 0 lated Press				
1/431169 Part	57 (7-09) Sr No.	Energiz kPa ±1 kPa ±1 After 1 (0-5 kP	ze the Coil, 0 kPa and 0 0 kPa (Wai 0 minutes, 0 Pa) ergize the C	Open Cock 'R' scheck Pressure t for 5 minutes to check for any processory at ucing Valve (Busing Val	set at 500 at 'M' = 500 o settle) essure drop 'S' = 0 kPa	Result √ M = 500 kPa ±10 kPa M = 500 kPa ±10 kPa 0- 5 kPa S = 0 kPa railer Car - 1) Outlet Regu (kF	500 500 (0 kPa Drop) 0 lated Press				
1/431169 Part	57 (7-09) Sr No.	Energiz kPa ±1 kPa ±1 After 1 (0-5 kP	ze the Coil, 0 kPa and 0 0 kPa (Wai 0 minutes, 0 Pa) ergize the C	gize Coil 3 times Open Cock 'R's check Pressure t for 5 minutes to check for any pr Coil, Pressure at ucing Valve (Book Supply Press (kPa)	set at 500 at 'M' = 500 o settle) essure drop 'S' = 0 kPa	Result √ M = 500 kPa ±10 kPa M = 500 kPa ±10 kPa 0- 5 kPa S = 0 kPa railer Car - 1) Outlet Regu (kF	500 500 (0 kPa Drop) 0 lated Press Pa)				
1/431169 Part Number	57 (7-09) Sr No.	Energiz kPa ±1 kPa ±1 After 1 (0-5 kP	ze the Coil, 0 kPa and 0 0 kPa (Wai 0 minutes, 0 Pa) ergize the C	Open Cock 'R' scheck Pressure t for 5 minutes to check for any precioil, Pressure at ucing Valve (Busing Valve (Busing Valve) 200 600	set at 500 at 'M' = 500 o settle) essure drop 'S' = 0 kPa	Result √ M = 500 kPa ±10 kPa M = 500 kPa ±10 kPa 0- 5 kPa S = 0 kPa Trailer Car - 1) Outlet Regu (kF	500 500 (0 kPa Drop) 0 lated Press 2a) 00 00				



		Che	ck Valve (F	Brake Module	Trailer Car - 2)		
Part Number	Sr No.	Inlet Press (kPa)	Outlet Press (kPa)	Outlet Valve (Input Press) (kPa)	Inlet Valve (Output Press) (kPa)	Min Openi Pressure (kPa)		Comments
1/118190	4207	200 500	186 486	200	0			
	(11-09)	750 735 750 0			16.2			
		950	934	950	0			
				rake Module (
Part Number	Sr No.	Inlet Press (kPa)	Outlet Press (kPa)	Outlet Valve (Input Press) (kPa)	Inlet Valve (Output Press) (kPa)	Min Openi Pressure (kPa)		Comments
		200	186	200	0			
1/118190	4188	500	485	500	0	15		
	(11-09)	750	735	750	0	10		
		950	935	950	0			
	Eme	ergency A	Application	Valve (Brake	Module Traile	er Car - 2)		
Part Number	Sr No.			Step		Expecte Resul		Noted Result
	Sr No.	Energis	se/De-ener	Step gize Coil 3 time	es			
Number	87	Energiz kPa ±1	ze the Coil, 0 kPa and		set at 500 e at 'M' = 500	Resul	t KPa	Result
		Energiz kPa ±1 kPa ±1	ze the Coil, 0 kPa and 0 0 kPa (Wai 0 minutes, 0	gize Coil 3 time Open Cock 'R' check Pressure	set at 500 e at 'M' = 500 to settle)	Result √ M = 500 I	kPa da kPa	Result
Number	87	Energiz kPa ±1 kPa ±1 After 10 (0-5 kP	ze the Coil, 0 kPa and 0 0 kPa (Wai 0 minutes, 0 2a)	gize Coil 3 time Open Cock 'R' check Pressure t for 5 minutes	set at 500 e at 'M' = 500 to settle) ressure drop	M = 500 I ±10 kP M = 500 I ±10 kP	kPa la kPa la	Fesult √ 508 508 (0 kPa
Number	87	Energiz kPa ±1 kPa ±1 After 10 (0-5 kP	ze the Coil, 0 kPa and 0 0 kPa (Wai 0 minutes, 0 a) ergize the C	gize Coil 3 time Open Cock 'R' check Pressure t for 5 minutes check for any p	set at 500 e at 'M' = 500 to settle) ressure drop t 'S' = 0 kPa	M = 500 I ±10 kP M = 500 I ±10 kP 0- 5 kP S = 0 kF	kPa la kPa la	Fesult 508 508 (0 kPa Drop)
Number	87	Energiz kPa ±1 kPa ±1 After 10 (0-5 kP	ze the Coil, 0 kPa and 0 0 kPa (Wai 0 minutes, 0 ra) ergize the C	gize Coil 3 time Open Cock 'R' check Pressure t for 5 minutes check for any p	set at 500 e at 'M' = 500 to settle) ressure drop t 'S' = 0 kPa	M = 500 I ±10 kP M = 500 I ±10 kP 0- 5 kP S = 0 kF	kPa kPa kPa Pa Pa	Fesult 508 508 (0 kPa Drop)
1/431169 Part	87 (12-09)	Energiz kPa ±1 kPa ±1 After 10 (0-5 kP	ze the Coil, 0 kPa and 0 0 kPa (Wai 0 minutes, 0 ra) ergize the C	gize Coil 3 time Open Cock 'R' check Pressure t for 5 minutes check for any p Coil, Pressure a ng Valve (Brak	set at 500 e at 'M' = 500 to settle) ressure drop t 'S' = 0 kPa	M = 500 I ±10 kP M = 500 I ±10 kP 0- 5 kP S = 0 kF	kPa kPa ka ba ba Pa Pa utlet F	Result 508 508 (0 kPa Drop) 0 Regulated ress
1/431169 Part	87 (12-09)	Energiz kPa ±1 kPa ±1 After 10 (0-5 kP	ze the Coil, 0 kPa and 0 0 kPa (Wai 0 minutes, 0 ra) ergize the C	gize Coil 3 time Open Cock 'R' check Pressure t for 5 minutes check for any p Coil, Pressure a ng Valve (Brak let Supply Pre (kPa)	set at 500 e at 'M' = 500 to settle) ressure drop t 'S' = 0 kPa	M = 500 I ±10 kP M = 500 I ±10 kP 0- 5 kP S = 0 kF	kPa kPa ka Pa Pa utlet F	Result
1/431169 Part	87 (12-09) Sr No.	Energiz kPa ±1 kPa ±1 After 10 (0-5 kP	ze the Coil, 0 kPa and 0 0 kPa (Wai 0 minutes, 0 ra) ergize the C	gize Coil 3 time Open Cock 'R' check Pressure t for 5 minutes check for any p Coil, Pressure a ng Valve (Brak let Supply Pre (kPa)	set at 500 e at 'M' = 500 to settle) ressure drop t 'S' = 0 kPa	M = 500 I ±10 kP M = 500 I ±10 kP 0- 5 kP S = 0 kF	kPa da kPa da Pa utlet F Pi (k	Result 508 508 (0 kPa Drop) 0 Regulated ress (Pa)
1/431169 Part Number	87 (12-09)	Energiz kPa ±1 kPa ±1 After 10 (0-5 kP	ze the Coil, 0 kPa and 0 0 kPa (Wai 0 minutes, 0 ra) ergize the C	gize Coil 3 time Open Cock 'R' check Pressure t for 5 minutes check for any p Coil, Pressure a ng Valve (Brak let Supply Pre (kPa) 200 600	set at 500 e at 'M' = 500 to settle) ressure drop t 'S' = 0 kPa	M = 500 I ±10 kP M = 500 I ±10 kP 0- 5 kP S = 0 kF	kPa kPa ka Pa Pa utlet i	Result 508 508 (0 kPa Drop) 0 Regulated ress (Pa)



		Che	ck Valve (Bra	ke Module	Trailer Car - 3)		
Part Number	Sr No.	Inlet Pres s (kPa)	Outlet Press (kPa)	Outlet Valve (Input Press) (kPa)	Inlet Valve (Output Press) (kPa)	Min Opening Pressure (kPa)	Comments
1/118190	4180 (11-09)	200 500 750 950	189 489 737 936	200 500 750 950	0 0 0 0	17.6	
		Che	ck Valve (Bra	ke Module	Trailer Car - 3)		
Part Number	Sr No.	Inlet Pres s (kPa)	Outlet Press (kPa)	Outlet Valve (Input Press) (kPa)	Inlet Valve (Output Press) (kPa)	Min Opening Pressure (kPa)	Comments
1/118190	4206 (11-09)	200 500 750 950	182 482 731 931	200 500 750 950	0 0 0 0	14.5	
	Eme	ergency /	Application V	alve (Brake	Module Traile	er Car - 3)	
Part Number	Sr No.		5	Step		Expected Result	Noted Result
			e/De-energize		✓	✓	
1/431169	92	kPa ±10	te the Coil, Op 0 kPa and che 0 kPa (Wait fo	ck Pressure	e at 'M' = 500	M = 500 kPa ±10 kPa	507
1/431169	92 (12-09)	kPa ±10 kPa ±10 After 10 (0-5 kP	0 kPa and che 0 kPa (Wait fo 0 minutes, che a)	ck Pressure 5 minutes ck for any p	e at 'M' = 500 to settle) ressure drop	±10 kPa M = 500 kPa ±10 kPa 0- 5 kPa	506 (1 kPa Drop)
1/431169	(12-09)	kPa ±10 kPa ±10 After 10 (0-5 kP	0 kPa and che 0 kPa (Wait for 0 minutes, che a) rgize the Coil,	ck Pressure 5 minutes ck for any pr Pressure at	e at 'M' = 500 to settle) ressure drop t 'S' = 0 kPa	±10 kPa M = 500 kPa ±10 kPa 0- 5 kPa S = 0 kPa	506 (1 kPa
	(12-09) Pr	kPa ±10 kPa ±10 After 10 (0-5 kP	O kPa and che O kPa (Wait for O minutes, che a) rgize the Coil, Reducing Valv	ck Pressure 5 minutes ck for any p Pressure at (e (Brake M	e at 'M' = 500 to settle) ressure drop t 'S' = 0 kPa	±10 kPa M = 500 kPa ±10 kPa 0- 5 kPa S = 0 kPa Car - 3)	506 (1 kPa Drop)
1/431169 Part Number	(12-09)	kPa ±10 kPa ±10 After 10 (0-5 kP	O kPa and che O kPa (Wait for O minutes, che a) rgize the Coil, Reducing Valv	ck Pressure 5 minutes ck for any pr Pressure at	e at 'M' = 500 to settle) ressure drop t 'S' = 0 kPa	±10 kPa M = 500 kPa ±10 kPa 0- 5 kPa S = 0 kPa	506 (1 kPa Drop) 0
Part	(12-09) Pr	kPa ±10 kPa ±10 After 10 (0-5 kP	O kPa and che O kPa (Wait for O minutes, che a) rgize the Coil, Reducing Valv	ck Pressure r 5 minutes ck for any pr Pressure at re (Brake M	e at 'M' = 500 to settle) ressure drop t 'S' = 0 kPa	±10 kPa M = 500 kPa ±10 kPa 0- 5 kPa S = 0 kPa Car - 3) Outlet Regula	506 (1 kPa Drop) 0
Part Number	(12-09) Pi Sr No.	kPa ±10 kPa ±10 After 10 (0-5 kP	O kPa and che O kPa (Wait for O minutes, che a) rgize the Coil, Reducing Valv	ck Pressure r 5 minutes ck for any pr Pressure at re (Brake M upply Press (kPa) 200 600	e at 'M' = 500 to settle) ressure drop t 'S' = 0 kPa	±10 kPa M = 500 kPa ±10 kPa 0- 5 kPa S = 0 kPa Car - 3) Outlet Regula (kPa	506 (1 kPa Drop) 0
Part	(12-09) Pr	kPa ±10 kPa ±10 After 10 (0-5 kP	O kPa and che O kPa (Wait for O minutes, che a) rgize the Coil, Reducing Valv	ck Pressure 5 minutes ck for any pressure at (e (Brake Mupply Press (kPa)	e at 'M' = 500 to settle) ressure drop t 'S' = 0 kPa	±10 kPa M = 500 kPa ±10 kPa 0- 5 kPa S = 0 kPa Car - 3) Outlet Regula (kPa	506 (1 kPa Drop) 0



		Che	ck Valve (Brake Module	Motor Car - 1)	
Part Number	Sr No.	Inlet Press (kPa)	Outlet Press (kPa)	Outlet Valve (Input Press) (kPa)	Inlet Valve (Output Press) (kPa)	Min Opening Pressure (kPa)	Comments
		200	183	200	0		
	4163	500	483	500	0	18.6	
	(9-09)	750	733	750	0	10.0	
		950	933	950	0		
		Che	ck Valve (Brake Module	Motor Car - 1)	
Part Number	Sr No.	Inlet Press (kPa)	Outlet Press (kPa)	Outlet Valve (Input Press) (kPa)	Inlet Valve (Output Press) (kPa)	Min Opening Pressure (kPa)	Comments
		200	199	200	0		
	4164	500 499 500 0			0	1.3	
	(9-09)	750	747	750	0	1.3	
		950	949	950	0		
	Em	ergency	Applicatio	n Valve (Brake	Module Moto	or Car - 1)	
Part Number	Sr No.			Step		Expected Result	Noted Result
		Energise	e/De-energ	ize Coil 3 times		✓	✓
1/431169	82		set at 500 at 'M' = 500 o settle)	M = 500 kPa ±10 kPa	507		
1/431169	(10-09)	After 10 (0-5 kPa		heck for any pre	essure drop	M = 500 kPa ±10 kPa 0- 5 kPa	507 (0 kPa Drop)
		De-Ener	gize the Co	oil, Pressure at '	'S' = 0 kPa	S = 0 kPa	0

3.3 Strip Down - Check Valves

Strip down of the Check Valves was undertaken whereby the Check Valves were examined and noted as per the below Figures 4 to 11:

3.3.1 Check Valve: NP: 3972









Figure 4 - Depicting Strip Down of Check Valve - NP: 3972











Figure 5 - Depicting Strip Down of Check Valve - NP: 4001











Figure 6 – Depicting Strip Down of Check Valve – NP: 4207









Figure 7 – Depicting Strip Down of Check Valve – NP: 4188

3.3.5 Check Valve: NP: 4180









Figure 8 – Depicting Strip Down of Check Valve – NP: 4180

3.3.6 Check Valve: NP: 4206









Figure 9 - Depicting Strip Down of Check Valve - NP: 4206









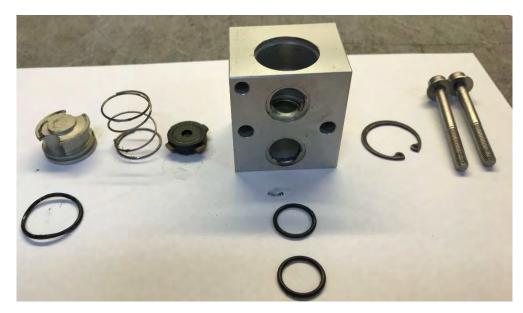


Figure 10 – Depicting Strip Down of Check Valve – NP: 4163











Figure 11 - Depicting Strip Down of Check Valve - NP: 4164



3.4 Strip Down – Emergency Application Valves

Strip down of the Emergency Application Valves was undertaken whereby the Emergency Application Valves were examined and noted as per the below Figures 12 to 15:

3.4.1 Emergency Application Valve: S/N: 57











Figure 12 – Depicting Strip Down of Emergency Application Valve – SN: 57



3.4.2 Emergency Application Valve: S/N: 87











Figure 13 – Depicting Strip Down of Emergency Application Valve – SN: 87



3.4.3 Emergency Application Valve: S/N: 92











Figure 14 – Depicting Strip Down of Emergency Application Valve – SN: 92













Figure 15 – Depicting Strip Down of Emergency Application Valve – SN: 82



3.5 Strip Down - Pressure Reducing Valves

Strip down of the Pressure Reducing Valves was undertaken whereby the Pressure Reducing Valves were examined and noted as per the below Figures 16 to 18:

3.5.1 Pressure Reducing Valve: S/N: 641









Figure 16 - Depicting Strip Down of Pressure Reducing Valve - SN: 641











Figure 17 – Depicting Strip Down of Pressure Reducing Valve – SN: 654









Figure 18 – Depicting Strip Down of Pressure Reducing Valve – SN: 656

3.6 Post Strip Down Observations

a) In review of Figures 4 to 11, there is no visible damage or anything unusual found on all examined Check Valves. This is apart from visible evidence of normal operational wear and tear with minor contamination. As shown in Figure 19 below, an observation of indentation markings on sub component, "Valve Complete" was noted for all Check Valves. This did not seem to impair the function of the Check Valves.



Figure 19 – Depicting Indentation Markings of 'Valve Complete'

b) In review of Figures 12 to 15, there is no visible damage or anything unusual found on all examined Emergency Application Valves. This is apart from visible evidence of normal operational wear and tear with minor contamination. Although an observation of indentation markings was noted for all Emergency Application Valve sub-component as shown below in Figure 20. This did not seem to impair the function of the Emergency Application Valves.

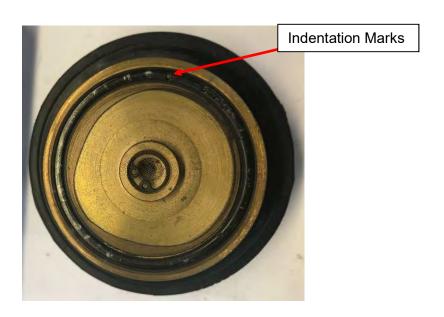


Figure 20 – Depicting Indentation Markings



c) In review of Figures 16 to 18, there is no visible damage or anything unusual found on all examined Pressure Reducing Valves. This is apart from visible evidence of normal operational wear and tear. Although, an observation of indentation markings was noted for all Pressure Reducing Valve sub-component as shown below in Figure 21. Also noted was contamination found, as shown in Figure 22. This did not seem to impair the function of the Pressure Reducing Valves.

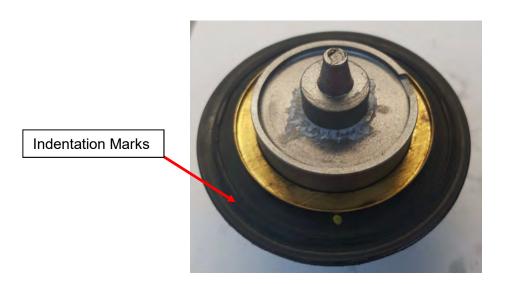


Figure 21 – Depicting Indentation Markings

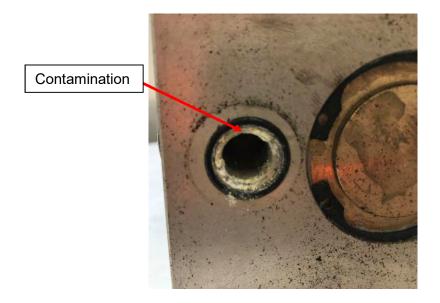


Figure 22 - Depicting Contamination



/// 4. COMMENTS and CONCLUSIONS

The following summarises the main observations for the 3 types of valves noted in this report:

Check Valves:

- The Check Valves functioned correctly and no Leaks or functional anomalies were noted.
- Considering the service period since introduction, the internals of the valves were visually found to be in a clean and reasonably good operating condition.

Emergency Application Valves:

- The Emergency Application Valves functioned correctly and no Leaks or functional anomalies were noted.
- Considering the service period since introduction, the internals of the valves were visually found to be in a clean and reasonably good operating condition.
- Indentation markings on sub-component was noted.

Pressure Reducing Valves:

- The Pressure Reducing Valves functioned correctly and regulated the required pressure very closely.
- No Leaks or functional anomalies were noted.
- Considering the service period since introduction, the internals of the valves have slight indications of possible dirt ingress with normal wear and tear.
- Indentation markings on sub-component was noted.
- Contamination was noted.

Considering the service/operational age of the components, described inspection and testing of the valves did not show any significant functional degradation. The internal components were also visually found to be in reasonably good condition.



/// 5. RECOMMENDATIONS

Based on the observations noted in this report, these valves functioned correctly and there were no signs of significant degradation and therefore these valves should continue to operate.

It is recommended that during the vehicle routine maintenance activities, as a precaution, closer attention should be payed for leaks or other deviations to the normal functions of the equipment to determine if this may indicate a rise in the functional degradation due to extended operational period.

It must be noted although the valves examined in this report did not show any significant degradation considering their introduction in 2011 and they should continue to operate, rubber and other components (i.e. diaphragms, springs, seals etc) can wear/degrade over time and must be suitably replaced by carrying out a major overhaul of the components.





Risk No.	Risk Title	Category	Description of Risk / Hazard	Cause	Consequences	Existing Design Controls o Vehicles (To mitigate or eliminate Cons
Α	В	С	D	E	F	G
HR01	Integrated Relay Valve (C.20.2.1 and C20.2.2)	Operational	R-relay valve stuck in closed position	Mechanical failure	No EP or Auto brake pressureEP; Auto Brakes do not apply on 1 bogie. Loss of brakes on one bogie	Faulty equipment can be isolated. The Brake Control System is on a basis. The loss of braking effort on 1 boson EM braking. Major fault of IRV will be monitore WSP system prevents undue brak
HR02	Integrated Relay Valve (C.20.2.1 and C20.2.2)	Operational	R-relay valve stuck in filling position	Mechanical failure	Full brake pressure; Undue pressure to the brakes of one bogie; Loss of brakes on one bogie; Delays with isolation of bogie; Undue and undetected brake application without locked axle - Smoke or Fire Undue and undetected brake application with locked axle - Excessive dynamic movement (Derailment - in worst case scenario)	WSP will act to release excessive Dump Valves K3; BC Pressures visible to driver fror (leading car) also via TMS; ED Brake still available, other bog function normally
HR03	Integrated Relay Valve (C.20.2.1 and C20.2.2)	Operational	R-relay valve stuck in exaust position	Mechanical failure	No EP or Auto brake pressureEP; Auto Brakes do not apply on 1 bogie	Faulty equipment can be isolated; The Brake Control System is on a basis. The loss of braking effort on 1 bot on EM braking Major fault of IRV will be monitore
HR04	Integrated Relay Valve (C.20.2.1 and C20.2.2)	Operational	Set point drifting of R relay valve	Fatigue	Pressure slightly higher / lower than required; Slight under / over braking on 1 bogie.	WSP prevents wheel damage
HR05	Integrated Relay Valve (C.20.2.1 and C20.2.2)	Operational	EVF (Application) valve stuck energized	Electrical / mechanical failure	Brake supply pressure always applied at the entrance of the EVS (Release) valve	The EVS valve can still hold and r EP brake on the relative bogie.
HR06	Integrated Relay Valve (C.20.2.1 and C20.2.2)	Operational	EVF valve stuck de- energized	Electrical / mechanical failure	No pressure applied at the entrance of the EVS valve; EP Brakes do not apply on one bogie; Loss of service brake for one bogie;	The Brake Control System is on a basis. The brakes on the unit are still avantumatic brake mode and for EN
HR07	Integrated Relay Valve (C.20.2.1 and C20.2.2)	Operational	EVS valve stuck energized	Electrical / mechanical failure	Air retained in EP control of the brake; Relay valve pilot chamber always pressurized. Impossible to release brakes after a braking action; Delay to isolate the bogie; Undue and undetected brake application without locked axle - Smoke or Fire Undue and undetected brake application with locked axle - Excessive dynamic movement (Derailment - in worst case scenario)	Faulty equipment can be isolated; The Brake Control System is on a basis; The loss of braking effort on 1 bo, on EM braking; Major fault of IRV will be monitore WSP system prevents undue brak
HR08	Integrated Relay Valve (C.20.2.1 and C20.2.2)	Operational	EVS valve stuck de- energized	Electrical / mechanical failure	No air to EP Brake control system; EP Brakes do not apply on one bogie; Loss of service brake for one bogie	Faulty equipment can be isolated. The Brake Control System is on a basis. The brakes on the unit are still av Automatic brake mode and for EM
HR09	Integrated Relay Valve (C.20.2.1 and C20.2.2)	Operational	MGD reducing valve stuck in open position	Mechanical failure	Higher output pressure; Possible fatigue of the EVF / EVS valves	Faulty equipment can be isolated; The Brake Control System is on a basis.
HR10	Integrated Relay Valve (C.20.2.1 and C20.2.2)	Operational	MGD reducing valve stuck in closed position	Mechanical failure	No air to EP Brake control system; EP Brakes do not apply on one bogie	Faulty equipment can be isolated; The Brake Control System is on a basis. The brakes on the unit are still av. Automatic brake mode and for EN Major fault of IRV will be monitore
HR11	Integrated Relay Valve (C.20.2.1 and C20.2.2)	Operational	MGD reducing valve stuck in exaust position	Mechanical failure	No air to EP Brake control system; EP Brakes do not apply on one bogie	Faulty equipment can be isolated: The Brake Control System is on a basis; The brakes on the unit are still av. Automatic brake mode and for EM Major fault of IRV will be monitore
HR12	Integrated Relay Valve (C.20.2.1 and C20.2.2)	Operational	set point drifting of MGD reducing valve	Fatigue	Slight under / over alimentation of EVF / EVS valves	The Brake Control System is on a basis.
HR13	Integrated Relay Valve (C.20.2.1 and C20.2.2)	Operational	No / wrong indication of TA pressure transducer	Electrical failure	No feedback of brake supply pressure; BCU detects fault and isolates the IRV in EP brake mode; Loss of EP brake on one bogie	Faulty equipment can be isolated; The Brake Control System is on a basis; The brakes on the unit are still av Automatic brake mode and for EN Major fault of IRV will be monitore

Existing Design Controls on Matangi Vehicles (To mitigate or eliminate Consequences, F)	Adequacy of Controls	Likelihood (After accounting for built-in control measures, G)	(After accounting for built-in control measures, G)	Current Risk Rating	Risk Treatment Options	New controls / Treatment Option and Plan	Residual Likelihood	Residual Consequence	Residual Risk Rating
G	н	I	J	К	L	М	N	0	Р
Faulty equipment can be isolated.; The Brake Control System is on a per bogie basis. The loss of braking effort on 1 bogie is tolerable on EM braking. Major fault of IRV will be monitored by BCU WSP system prevents undue braking effort	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
WSP will act to release excessive BCP using Dump Valves K3; BC Pressures visible to driver from gauge (leading car) also via TMS; ED Brake still available, other bogies still function normally	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
Faulty equipment can be isolated; The Brake Control System is on a per bogie basis. The loss of braking effort on 1 bogie is tolerable on EM braking Major fault of IRV will be monitored by BCU	Adequate	1	3	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	3	Low
WSP prevents wheel damage	Adequate	1	21	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
The EVS valve can still hold and release of the EP brake on the relative bogie.	Adequate	1 00	1520 1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
The Brake Control System is on a per bogie basis. The brakes on the unit are still available in Automatic brake mode and for EM braking	181	otem 2009	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
Faulty equipment can be isolated; The Brake Control System is on a per bogie basis; The loss of braking effort on 1 bogie is tolerable on EM braking; Major fault of IRV will be monitored by BCU; WSP system prevents undue braking effort	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
Faulty equipment can be isolated. The Brake Control System is on a per bogie basis. The brakes on the unit are still available in Automatic brake mode and for EM braking	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
Faulty equipment can be isolated; The Brake Control System is on a per bogie basis.	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
Faulty equipment can be isolated; The Brake Control System is on a per bogie basis. The brakes on the unit are still available in Automatic brake mode and for EM braking Major fault of IRV will be monitored by BCU	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
Faulty equipment can be isolated; The Brake Control System is on a per bogie basis; The brakes on the unit are still available in Automatic brake mode and for EM braking; Major fault of IRV will be monitored by BCU	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
The Brake Control System is on a per bogie basis.	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
Faulty equipment can be isolated; The Brake Control System is on a per bogie basis; The brakes on the unit are still available in Automatic brake mode and for EM braking; Major fault of IRV will be monitored by BCU	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low

Risk No.	Risk Title	Category	Description of Risk / Hazard	Cause	Consequences
HR14	Integrated Relay Valve (C.20.2.1 and C20.2.2)	Operational	Drifting of TA pressure transducer	Miscalibration	Incorrect feedback of brake supply pressure
HR15	Integrated Relay Valve (C.20.2.1 and C20.2.2)	Operational	No / wrong indication of Tpil pressure transducer	Electrical failure	No feedback of EP brake request to the R relay valve; BCU detects fault and isolates the IRV in EP brake mode; Loss of EP brake on one bogie
HR16	Integrated Relay Valve (C.20.2.1 and C20.2.2)	Operational	Drifting of Tpil pressure transducer	Miscalibration	Incorrect feedback of EP brake request to the R relay valve; Slight under / over braking on 1 bogie
HR17	Integrated Relay Valve (C.20.2.1 and C20.2.2)	Operational	No / wrong indication of TLP pressure transducer	Electrical failure	No feedback of suspension pressure; BCU detects fault and uses Crush Load value instead of pressure information
HR18	Integrated Relay Valve (C.20.2.1 and C20.2.2)	Operational	Drifting of TLP pressure transducer	Miscalibration	Incorrect feedback of suspension pressure; Slight under / over braking on 1 bogie
HR19	Pressure Regulator (E4)	Operational	Stuck in closed position	Mechanical failure	No air flow to Trailer car park brake cylinders; Impossible to applicate / release parking brake on 1 car; Set unable to enter service
HR20	Pressure Regulator (E4)	Operational	Stuck in open position	Mechanical failure	Overpressure; Reduced life for equipment downstream
HR21	Pressure Regulator (E4)	Operational	Stuck in exaust position	Mechanical failure	Undue venting of the pipe towards the valve [E1]; undue parking brake application on one car; Withdrawal/set unable to enter service
HR22	Pressure Regulator (E4)	Operational	Set drift too high	Fatigue	Slight overpressure; Potential reduced life of equipment downstream
HR23	Pressure Regulator (E4)	Operational	Set drift too low	Fatigue	Incorrect subsystem airpressure; Park brake may not fully release, dragging brakes; Delay to isolate parking brakes; Undue and undetected brake application without locked axle - Smoke or Fire Undue and undetected brake application with locked axle - Excessive dynamic movement
					(Derailment in worst case scenario)
HR24	NJMR - Spring Reference Distributor (C43)	Operational	Output lower than requested	Mechanical failure	Low signal pressure to IRV; Underbraking on 1 vehicle in Auto brake
HR25	NJMR - Spring Reference Distributor (C43)	Operational	No output	Mechanical failure	No signal pressure to IRV; No braking on 1 vehicle in Auto brake; Loss of emergency brake
HR26	NJMR - Spring Reference Distributor (C43)	Operational	Constant output	Mechanical failure	Constant signal pressure to IRV; Undue braking on 1 vehicle; Withdrawal / set unable to enter service
HR27	NJMR - Spring Reference Distributor (C43)	Operational	Output higher than requested	Mechanical failure	High signal pressure to IRV; Overbraking / undue braking on 1 vehicle; Risk of overheating of brake components; Withdrawal / set unable to enter service; Undue and undetected brake application without locked axle - Smoke or Fire Undue and undetected brake application with locked axle - Excessive dynamic movement
HR28	NJMR - Spring Reference Distributor (C43)	Operational	Incorrect timing	Mechanical failure	(Derailment - in worst case scenario) Fast or slow signal pressure change to IRV; Brake timings out of specification on 1 vehicle in Auto brake; Loss of emergency brake

Evistina Design Controls on Metangi		Likelihood	Consequence						
Existing Design Controls on Matangi Vehicles (To mitigate or eliminate Consequences, F)	Adequacy of Controls	(After accounting for built-in control measures, G)	(After accounting for built-in control measures, G)	Current Risk Rating	Risk Treatment Options	New controls / Treatment Option and Plan	Residual Likelihood	Residual Consequence	Residual Risk Rating
Faulty equipment can be isolated; The Brake Control System is on a per bogie basis; The brakes on the unit are still available in Automatic brake mode and for EM braking; Major fault of IRV will be monitored by BCU	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance ccept inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period		1	Low
Faulty equipment can be isolated; The Brake Control System is on a per bogie basis; The brakes on the unit are still available in Automatic brake mode and for EM braking; Major fault of IRV will be monitored by BCU	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period		1	Low
Faulty equipment can be isolated; The Brake Control System is on a per bogie basis; Major fault of IRV will be monitored by BCU; WSP system prevents wheel flattening	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
The Brake Control System is on a per bogie basis; Major fault of IRV will be monitored by BCU; WSP system prevents wheel flattening	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
The Brake Control System is on a per bogie basis; Major fault of IRV will be monitored by BCU; WSP system prevents wheel flattening	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
Manual release available Multiple brake stations - redundancy	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
Pressure gauge [E8] allow to check parking brake pipe pressure	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
Manual release available Pressure switches [E3] communicate the status of the parking brakes	Adequate	1 (O	wbarn	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
Pressure gauge [E8] allow to check parking brake pipe pressure	Adequate	oten	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
Manual release available Multiple brake stations - redundancy	Ayundai Ayundai	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
Redundancy in brake control Redundancy in EM brake command execution During braking required through the aripilot [C41] the BC gauge [C26] indicates to the driver that there is not the expected pressure in the brake cylinders.	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
Redundancy in brake control Redundancy in EM brake command execution During braking required through the aripilot [C41] the BC gauge [C26] indicates to the driver that there is not the expected pressure in the brake cylinders.	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
LPP valve [C48] limits maximum pressure BC gauge [C26] indicates to the driver that there is an undue pressure in brake cylinders	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
LPP valve [C48] limits maximum pressure BC gauge [C26] indicates to the driver that there is an undue pressure in brake cylinders	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
Well proven design	Adequate	2	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	2	1	Low

Risk	Risk Title	Category	Description of Risk /	Cause	Consequences
No.		g,	Hazard		
HR29	LPP (C48.1 and C48.2)	Operational	Stuck closed	Mechanical failure	No auto brake air input to IRV; Auto Brakes do not apply on 1 bogie; Undue and undetected brake application without locked axle - Smoke or Fire Undue and undetected brake application with locked axle - Excessive dynamic movement (Derailment - in worst case scenario)
LIDOO	LDD (C40.4 and C40.2)	Onersticas	Chielianan	Mechanical	Loss of emergency brake No load compensation of NJMR pressure to
HR30	LPP (C48.1 and C48.2)	Operational	Stuck open	failure	IRV; Slight overbraking on one bogie in auto brake
HR31	LPP (C48.1 and C48.2)	Operational	Stuck in exaust position		Undue venting of the pipe to IRV; Auto Brakes do not apply on 1 bogie; Loss of emergency brake
HR32	LPP (C48.1 and C48.2)	Operational	Set drift to high	Fatigue	Air to IRV at higher pressure than required; Slight overbraking on one bogie in auto brake
HR33	LPP (C48.1 and C48.2)	Operational	Set drift to low	Fatigue	Air to IRV at lower pressure than required; Slight underbraking on one bogie in auto brake
HR34	LPP (C48.1 and C48.2)	Operational	Minor Leakages	Damaged Seals	Minor local leakage of compressed air
HR35	Emergency Valve (C44)	Operational	EP Valve fail closed	electromechanica I failure	Air retained in EM system; No pneumatic EM brake application; Set unable to enter service
HR36	Emergency Valve (C44)	Operational	Exhaust valve Fail - closed	electromechanica I failure	Will not exhaust; No pneumatic EM brake application; Set unable to enter service
HR37	Emergency Valve (C44)	Operational	EP Valve fail open / loss of power	electromechanica I failure	Air loss from Exhaust valve; Undue EM Brake request; Withdrawal
HR38	Emergency Valve (C44)	Operational	Exhaust Valve Fail - open	electromechanica I failure	Brake Pipe exhausts; Undue EM Brake request; Withdrawal
HR39	Emergency Valve (C44)	Operational	Leakages	Seal damaging	Minor local leakage of compressed air
HR40	Emergency Valve (C44)	Operational	Leakages	Fatigue Failure of SRS's Reverse Engineered Parts	(Taking the most safety critical consequence among all failure modes) Withdrawal
HR41	Check Valves (C15.2/01 and C15.2/02)	Operational	Internal leakage	Mechanical failure	Allow back flow of air into the MR pipe
HR42	Check Valves (C15.2/01 and C15.2/02)	Operational	Leakages	Seal damaging	Minor local leakage of compressed air
HR43	Check Valves (C20.6.2/01 and C20.6.2/02)	Operational	Internal leakage	Mechanical failure	Allow back flow of air from MR pipe into BP; Possible release of Auto brake application
HR44	Check Valves (C20.6.2/01 and C20.6.2/02)	Operational	Leakages	Seal damaging	Minor local leakage of compressed air
HR45	Check Valves	Operational	Leakages	Fatigue Failure of SRS's Reverse Engineered Parts	(Taking the most safety critical consequence among all failure modes) Allow back flow of air from MR pipe into BP; Possible release of Auto brake application
HR50	Pressure Switch ACG (B4)	Operational	Contacts fail closed	Electro / mechanical failure	Compressor runs continuously; Excess air usage although will be discharged from safety valve; Compressor may provide overpressure to pneumatic system - Airbag might be burst
HR51	Pressure Switch ACG (B4)	Operational	Contacts fail open	Electro / mechanical failure	Compressor switches off.; Loss of alimentation of MR pipe; Withdrawal / set unable to enter service

Foliation Parism Controls an Material		Likelihood	Consequence						
Existing Design Controls on Matangi Vehicles (To mitigate or eliminate Consequences, F)	Adequacy of Controls	(After accounting for built-in control measures, G)	(After accounting for built-in control measures, G)	Current Risk Rating	Risk Treatment Options	New controls / Treatment Option and Plan	Residual Likelihood	Residual Consequence	Residual Risk Rating
Redundancy in brake control The Brake Control System is on a per bogie basis.	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
Redundancy in brake control. WSP avoids wheel flattening	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
Redundancy in brake control The Brake Control System is on a per bogie basis.	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
Redundancy in brake control. WSP avoids wheel flattening	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
Redundancy in brake control The Brake Control System is on a per bogie basis.	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
AGTU compensates minor leakages	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
Well proven design Safety Loop interruption will be notified to driver Redundancy in EM brake request	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
Well proven design Safety Loop interruption will be notified to driver Redundancy in EM brake activation	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
Can close cock C42 to allow BP to charge, under defined conditions. Well proven design	Adequate	1	Man	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
Can close cock C42 to allow BP to charge, under defined conditions. Well proven design	Adequate	1 (0)	15:20 1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
AGTU compensates minor leakages	Adequate.	O(8) 36-10 0	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	3	1	Low
Well proven design Safety Loop interruption will be notified to driver Redundancy in EM brake activation A functional testing will be done for 100 applications followed by an enduracne testing for 6 months on Matanagi under operation	Adequate Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
Other check valves provide protection against air loss	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
AGTU compensates minor leakages	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
Redundancy in brake control Cocks C14, C35 allow isolation Chockes C15.3 and C20.6.2 reduce air flow.	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
AGTU compensates minor leakages	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
Redundancy in brake control Cocks C14, C35 allow isolation Chockes C15.3 and C20.6.2 reduce air flow. A functional testing will be done for 100 applications followed by an enduracne testing for 6 months on Matanagi under operation	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
Safety valve will vent excessive pressure to prevent an overpressure situation.	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low
MR pipe pressure can be read through gauge [C25]; Protected air supply for air brake equipment, with capacity for at least 3 stops after loss of compressor; If MR pressure drop to predetermined pressure, MR Governor will detect - emergency brake can be automatically applied	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low

Risk No.	Risk Title	Category	Description of Risk / Hazard	Cause	Consequences
HR52	Pressure Switch ACG (B4)	Operational	highest consequence	Fatigue Failure of SRS's Reverse Engineered Parts	(Taking the most safety critical consequence among all failure modes) Compressor runs continuously; Excess air usage although will be discharged from safety valve; Compressor may provide overpressure to pneumatic system - Airbag might be burst

Existing Design Controls on Matangi Vehicles (To mitigate or eliminate Consequences, F)	Adequacy of Controls	Likelihood (After accounting for built-in control measures, G)	Consequence (After accounting for built-in control measures, G)	Current Risk Rating	Risk Treatment Options	New controls / Treatment Option and Plan	Residual Likelihood	Residual Consequence	Residual Risk Rating
Safety valve will vent excessive pressure to prevent an overpressure situation. No components from Pressure Switch assembly were required to undergo endurance testing as the parts were identified as commercially available or conforming to a known standard.	Adequate	1	1	Low	Accept	Existing built-in system control measures and preventive maintenance inspections adequate to mitigate any potential risk which may arise due to extension of overhaul period	1	1	Low

Hyundai Rotem Company



JunSuk Park Manager/O&M Business Team **Hyundai Rotem** EMU Depot, 154 Thorndon Quay, Wellington, New Zealand.6011

23rd May 2019

Revision of overhaul interval of Brake Frame Module - Matangi Fleet Subject:

Dear Alex,

FT have been requested by HRC to extend the overhaul period of the Brake Frame Module from 6 years to 9 years. The first Matangi EMU train sets entered service circa 2011.

FT were recently engaged by HRC to conduct conditional assessments on components fitted to the brake modules. The findings of the assessments were reported to HRC in FT reports FTAU01066-000-E06TER and FTAU01066-000-E07TER. These reports were sent to HRC.

Considering the service/operational age of the components, the inspection and testing of the valves did not show any significant functional degradation. The internal components were also found to be in reasonably good condition.

It can be noted that the valves examined in this report did not show any significant degradation considering their introduction in 2011 and they should continue to operate until the requested 9 year period.

However, rubber and other components (i.e. diaphragms, springs, seals, solenoid valves, etc) can wear/degrade over time and must be suitably replaced by carrying out a major overhaul of the components during the 9 year period.

The brake module performs a safety critical function. Considering that HRC have replaced a number of components on some brake modules and based on the findings of the assessment reports FT agree that an extension may be considered with additional operational controls in place.

These additional controls should include:

- Regular inspections for the correct brake cylinder pressures in service and emergency conditions for both EP and Auto brake modes (which is understood to be carried out during regular maintenance
- Possible addition of a more stringent regular leakage check maintenance tasks every 6 months

Ongoing checks for component failure trends.

If there is a significant increase on the number of component failure, the overhaul programme may need to be brought forward. FT also recommends that a further condition assessment is conducted at the 6 year period following the first overhaul.

Yours sincerely,

Munaf Mussa

Engineering Manager

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			Referen	ce Informati	on		
Subject	The second secon	equired Gangway Be ent on C3 check	llow as condit	tional	Priority		□A ⊠B □C
Change T		t-only Change (No	□ Trial?				
ECP No.	ECP-M-1	99	Rev. No.	1	Submission I	Date	19/02/2019
ECR No.	ECR-M-7	71	Rev. No.	1	Submission I	Date	19/02/2019
Origin	Other		Reference				
Submitter	BY Han						
Assets affected	⊠M1 ⊠Mainte				□SE nt and Equipmen		□AG
			Chang	e Descriptio	n		
Reason for Change	Description	below; 1. The outer corrugation abrasive is corrosions. 2. Inspection affected a roof area protect the ceiling are much corrosions. 3. Inner believe on corrugation profile. Not the screw on corrugation profile. Not the screw on corrugation profile. Not the Gangways are frame. Gangways are frame. Gangways are frame of Gangway in machine clean the outer believe that the outer believe th	r bellows: over near and sewir brake systems have been for a for corrosion areas of corrosion between the screw on frame and sow Conditions and so the severe. In excellent don't require severe and the severe of	rerall conditions joints. Find dust and ound at the Gan sion has been at the Gan sion has been and care on frame and care on frame and care body. It coverall condition experienced by the con	ion is good. No oor section of the the bellow is averaged in frames. In gways screw on the found at the rise than the side of front wall against the was the most wall are was the gangwa andition is exceller to some floor contact the company of th	serious defects e outer bellow ha erall in the need frame: All inspect screw on frame. I es, but still very lie st water-retention l corroded. The sid y. The water has l et. No serious defe verings having all sion at the screw e situation of the ce repair the gangway P is confined C3	ording to 4.2 Repair y with paint work and Scope.
	Category	□Customer Requirement □Operator Requirement □Network Requirement □Design Change □Process Improvement ⊠Maintenance Optimisation □Material Change □Supplier Change □Obsolescence Management					
(Reports, Previous	e Documents Standards, ECP's, tions, etc)	on C3 che 2. Gangway 3. M93110-3	The second second second	sessment by ter 14.2 Gar	Hubner	ay Bellow as cond	litional replacement
	Title: End	ineering Change	Form	F	Revision: 1.0	Da	ate: 23/08/2019



	V-		Change Impacts		ECR Close
Cost Impact	□No cos			Value	
oot input	Detail/ Re	eferences: Total a	mount of cost benefit is	(\$)	
Contract Impact	No				
Other impacts	□Reliabil		□Maintainability □Performance	□ Driver Simulator □ Software/Escrow	Not
	Detail/ Re	ferences: NA			bampleled
Safety Updates	□FMECA	eferences: NA	□Risk Register	☐Safety System	Not completed
Human Factors	□Crew in	A Property of the Control of the Con	□Passenger Impac	Maintainer Impact	completed
Rail vehicles	□Fleet		Vehicle #	Marie Carlos	Mot completed
Inventory/ Spares		modification ferences: No	□Disposal	Replacement/requisition	completed
Impacted Documents	Manual	□Matangi Techn ☑Matangi Maint □Matangi Illustr □SW Carnage	enance Manual ated Parts Catalogue	□Matang Frain Crew Manual Matangi Diagnostics and Fault Finding □Depot Plant and Equipment Manual □SE Carriage Manual ☑Check List	Not completed
	As Built Drawing	□Matangi	□sw	□SE	Not

Title: Engineering Change Form		Revision: 1.0	Date: 23/08/2019	
Approved by:	SungHo Alex KIM	SungHo Alex KIM		
UNCONTROLLED WHEN PRINTED			Page: 2/4	



		Referen	ce Informa	ation	
Subject	Change required Gangway Bellow as conditional replacement on C3 check			Priority	□A ⊠B □C
Change Type	Document-only Change (No ECP)	□ Trial?			
ECP No.	ECP-M-199	Rev. No.	1	Submission Date	19/02/2019
ECR No.	ECR-M-771	Rev. No.	1	Submission Date	19/02/2019

		hange Proposal (ECP)	
	Name	Signature	Date
H-Rotem	Sugh Km	del	161 Jan 120
TDW	Luke Basilicata	2 Bilicita	16-1-2020
GWRC	R-Hayward.	Pet.	16-1-2020
Comments:		~03//	
	Engineering C	hange Request (ECR)	
	Name	Signature	Date
H-Rotem	Name Suyth Kin 100 Luke Basilicator R. Hayland 100	(E) 1800	16/Lan/20
TDW	Luke Basilicato	520 - C Bil: ata	16-1-2020
GWRC	R. Hayward 102	ROU	16-1-2020
Comments:			
		uest (ECR) CLOSURE Check List	
Implementation Completion Confirmation	☐ Closed W/O ☐ Hard copies ☐ Inventory issued ☐ MMIS upda	s of Document changed Soft copie	es of Document changed
Commination	Name	Signature	Date
Confirmed by			
Confirmed by			
	Engineering Change	e Request (ECR) CLOSURE	
	Name	Signature	Date
H-Rotem			
TDW			
GWRC			
T	itle: Engineering Change Form	Revision: 1.0	Date: 23/08/2019
Approved	by: SungHo Alex KIM		
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ENGINEERING CHANGE FORM



Submission Checklist

Change Suggestion Form Change Suggestion Form FRACAS Report Technical Description/Specification Operation and Maintenance Manuals As built drawings	• 0		
Change Suggestion Form FRACAS Report Technical Description/Specification Operation and Maintenance Manuals As built drawings	0		•
tintenance Manuals		0	0
Technical Description/Specification Operation and Maintenance Manuals As built drawings		0	0
• • • • • • • • • • • • • • • • • • •		•	•
	35.60 3.50 3.50 3.50 3.50 3.50 3.50 3.50 3.5		•
	0.36	0	
Trial Plan	1.00		•
Modification instructions/ FMI			0
Fleet Modification Plan		u.	•
Inventory Management Plan	0		0
Software Revision History			•
Software Release Certificate			•
Mandatory	quired F = Fleet T = Trial	ial	

Title: Engineering Change Form	ige Form	Revision: 1.0	Date: 23/08/2019
Approved by:	SungHo Alex KIM		
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			Reference	ce Informati	on		
Subject	Proposa	al for Output bearing of	driving gear o	overhaul	Priority	□A ⊠B □C	
Change T		ent-only Change (No	☐ Trial?	ial?			
ECP No.	ECP(F)-	-M-212	Rev. No.	1	Submission Date	1/04/2019	
ECR No.	ECR-M-	778	Rev. No.	1	Submission Date	1/04/2019	
Origin	Other		Reference				
Submitter	BY Han	1.000		-0.11	Top	□AG	
Assets affected					⊔AG .		
			Change	Descriptio	n		
Reason for Change	Description	the replacement in and OEM of Drivin Background: A presentation was 08th August 2018 to recommendations 1. Change of pin This change haring Detail 2. Revision of respectively—as There are two reas 1. Fatigue life of bearings (Refinger Gearbox_revize). OEM recommendations	s given by R&I o address pro made during s ion bearings (nas already be le Change in h placement into beling propose sons why revis output bearing er Page 10 of 2).	years (C3) to all relections with said presention 19 in Ferval of outperval of outperval of replaying is much lattachment of outpert of outperval of outperval of replaying the said of th	vant Matangi stakeholders pinion bearing of driving gi tation: gute 1) from existing type d and approved through E out bearings (aka wheel ge his ECP.		
	Title: En	gineering Change	Form		Revision: 1.0	Date: 23/08/2019	
Annro	ved by:	SungHo Alex KIM					
Appro	tou by.	UNCONTROLLE	TO WILLIEM F	DINTED		Page: 1/4	



	Category	□Customer Requirement □Design Change □Material Change	□Operator Requirement □Process Improvement □Supplier Change	□Network Requiren ⊠Maintenance Opti □Obsolescence Ma	misation
Reference Dod (Reports, Previous Investigations,	Standards, ECP's,	ECPSS ECP(F)-M M93110-3 Part B (EM00000385_revi REDG205594_Da Communication wi	l-212-10, Proposal for Output Chapter 3 Bogie C maged bearing in the Gearbo	bearing of driving gear ove	
		Change	Impacts		ECR Close
Cost Impact	□No cos		intainer cost V cost	Value	
	and the second second second	eferences: Total expected of term of contract.	cost benefit is	(\$)	
Contract Impact	No				
Other impacts	□Reliabil	∟iviai		river Simulator oftware/Escrow	Not
	Detail/ Re	ferences: NA		C	completed
Safety Updates	□FMECA Detail/ Re	☐Risi	k Register □Sa	afety System	Not completed
Human Factors	□Crew in Detail/ Re	npact	senger Impact	aintainer Impact	completed
Rail vehicles	□Fleet	(1 ⁰ 2) Ve	hicle #		completed
Inventory/ Spares		e modification □Disp ferences: No	oosal	eplacement/requisition	No.
Impacted Documents	Manual	□Matangi Technical Manua ⊠Matangi Maintenance Mai □Matangi Illustrated Parts © □SW Carriage Manual ⊠Star Chart	nual Matangi Diag	nostics and Fault Finding and Equipment Manual	Not completed
	As Built Drawing	□Matangi	□SW	□SE	Not

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Approved by:	SungHo Alex KIM	SungHo Alex KIM		
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		Referen	ce Informati	on	
Subject	Proposal for Output bearing of interval	□A ⊠B □C			
Change Type	Document-only Change (No ECP)	☐ Trial?			
ECP No.	ECP(F)-M-212	Rev. No.	1	Submission Date	1/04/2019
ECR No.	ECR-M-778	Rev. No.	1	Submission Date	1/04/2019

	Cha	nge Authority	
	Engineering	g Change Proposal (ECP)	
	Name	Signature	Date
H-Rotem	Sugth ke	The	16/far/20
TDW	Luke Basilicata	2 Biliata	16-1-2020
GWRC	R. Hayward.	ROU.	16-1-2020
Comments:			
	Engineering	g Change Request (ECR)	
	Name	Signature	Date
H-Rotem	Sugto Ku . 0	shh	16 Han 150.
TDW	Luke Busilisation	2020 C Bilinta	16-1-2020
GWRC	R. Hayward - 192	ROY.	16-1-2620
Comments:			
		Request (ECR) CLOSURE Check List	
Implementation Completion Confirmation	☐ Closed W/O ☐ Hard cop☐ ☐ Inventory issued ☐ MMIS up	pies of Document changed Soft copie pdated	es of Document changed
	Name	Signature	Date
Confirmed by			
Confirmed by			
	Engineering Char	nge Request (ECR) CLOSURE	
	Name	Signature	Date
H-Rotem			
TDW			
GWRC			
Т	itle: Engineering Change Form	Revision: 1.0	Date: 23/08/2019
Approved I	by: SungHo Alex KIM		
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ENGINEERING CHANGE FORM



Submission Checklist

		Document-only Change	y Change	Change of Supplier only	er only	Hardware Change	Software Change
2	Completed Form	•		•		•	•
ļ	Change Suggestion Form	0		0		0	0
6	FRACAS Report				5	o	0
2	Technical Description/Specification			7		•	•
	Operation and Maintenance Manuals	•		9.	Language Company	•	
	As built drawings	0				0	
	Trial Plan	हर ¹¹ वेन 1				•	•
0	Modification instructions/ FMI					т.	0
2	Fleet Modification Plan					•	
	Inventory Management Plan			0			0
	Software Revision History						
	Software Release Certificate						•
		Mandatory	o As Required	F = Fleet	T = Trial		
lite	Title: Engineering Change Form			Revis	Revision: 1.0		Date: 23/08/2019

SungHo Alex KIM Approved by:

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ENGINEERING CHANGE REQUEST (Physical Change)

Initiation (Change Requester) ECR No.: ECR/M/758					
Name: Shishir Tripathi Company: HRW Date: 22.11.2019					
Engineering Change Details (To be completed by the Change Requester)					
Nature: Rotem Quali	ty or Design Improvemen	t / GW Customer Reques	ted Variation		
Nature: Complete Flo	eet Modification / Trial M	odification			
Brief description of char	ige:				
Revision of BFM Overh	aul Interval from C2 (6 Ye	early) to C3 (9 Yearly)			
Reason of change:					
Technical and Commerc	ial Reasons				
Details of change:					
Overhaul interval of Bre	ak Frame Modules to be r	revised from existing 6 Ye	early to 9 Yearly task.		
ECP Approved	Y) / N	ECP No.: ECP(F)-M-23	5		
Brief Methodology Attached: Y N					
Post modification Test /	Validation Methodology A	Attached: YN			
If Trial, list which Units	affected: NA				
Trial Duration (if applica	ible): NA				
If Trial, list which Units affected: NA Trial Duration (if applicable): NA O&M Documentation affected: VES - M93110-3 Part B Chapter 6 Brake System					
TED WISSING STARE CHAPTER SYSTEM					
O&M Document ECR No (if applicable);					
Maintenance manual update will need to be supplied in word copy with updated revision record					
before ECR closure.					
Cost (Total): None Material: None Labour:					
Change Approval					
Company	Name Signature Date				
EMU Depot	Sighten	she	26/Dov/2017		
R&D (as required)					
Transdev	L. Basilicata	2 Bilita	29-11-19		
GWRL	R. Hayard RAM 3-12-19				

ENGINEERING CHANGE REQUEST (Physical Change)

Change Implementation Completion Confirmation (To be completed by the Change Requester)					
Refer to next page for the following:					
1) Work start date, finish date and Work Order No. of each Unit affected					
2) Date Unit returned to Depot after work completion.					
Schedule for completion of Master Controller Overhaul on Matangi fleet will follow Heavy					
Maintenance Plan.					
Change acceptance criteria achieved: Y / NA					
All parts in inventory have been modified: Y / NA					
All parts in Rotem Warranty store have been modified: Y / NA					
Change to O&M Documentation completed: Y / NA					
Document change will be completed before closure of this ECR.					
Work order close out date in Maximo:					
Confirmed by (Name): Signature: Date:					
ECR Close Out					
Company	Name	Signature	Date		
EMU Depot	الله الله الله الله الله الله الله الله				
R&D (as required)		3-12-5			
Transdev	111002				
GWRL	12 ag2				

Dated 18 November 2022

Rail Partnering Contract for the Greater Wellington Metro Rail Service – PT 0416

Deed of Variation: Snapper on Rail

Wellington Regional Council (GWRC)
Greater Wellington Rail Limited (GWRL)
and
Transdev Wellington Limited (Operator)

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Back	ground3	
Opei	ative provisions4	
1.	Definitions and interpretation4	
2.	Coming into effect of provisions4	
3.	Amendments to the Partnering Contract4	
4.	Deed to comprise a Transaction Document4	
5.	Miscellaneous5	

Schedule 1 - Definitions and Interpretation

Schedule 2 – Amendments to the Partnering Contract

Attachment One – new Schedule 6 (Financial and Performance Regime)

Attachment Two - new Schedule 13 (IFT Programme)

Attachment Three - new Annexure 6 (Fares, Ticketing and Enforcement Requirements)

Schedule 3 - Guarantor Acknowledgement

Deed of Variation

Parties

- (1) Wellington Regional Council, a public statutory body constituted under the Local Government Act 2002 (**GWRC**);
- (2) Greater Wellington Rail Limited (company number 1846367) (GWRL); and
- (3) Transdev Wellington Limited (company number 5164521) (**Operator**).

Background

- A On 10 March 2016, the Parties entered into the Partnering Contract.
- B By letters of agreement dated 2 July 2021 and 27 April 2022, the Parties agreed to implement an initial "Snapper on Rail" pilot project on the Johnsonville Line (**Pilot Project**).
- As a result of the success of the Pilot Project and an anticipated delay in the provision of the integrated fares and ticketing programme, the Parties have agreed to amend Schedule 13 (IFT Programme) and the other parts of the Partnering Contract relevant to fares and ticketing as set out in this Deed, to enable the use of the "Snapper System" for electronic ticketing on all Scheduled Services and Special Event Services.
- D This Deed records an agreement to remove the Passenger Services Fee for the IFT Programme Pre Priced Option, and replace it with cost reductions resulting from the introduction of Snapper on Rail. Snapper on Rail cost reductions predominantly result from reduced costs for:
 - (a) reduced paper ticket printing costs;
 - (b) Ticket Agency costs;
 - (c) electronic payments charges associated with paper ticket sales.
- E This Deed also records the changes to the role performed by on-board staff resulting in:
 - (a) a reduced emphasis on on-board ticket sales; and
 - (b) a greater emphasis on customer support and revenue protection.
- F This Deed also records the changes to the role performed by off-board staff resulting in:
 - (a) removal of off-board ticket sales in regard to the Rail Unit; and
 - (b) a greatly increased emphasis on customer support and services including an increase in the scope of customer support from the Operator for services on both the Rail Unit and the broader Metlink network including rail, bus and ferry trip planning, information, and advice.

Deed of Variation: Snapper on Rail - Rail Partnering Contract PT0416

- G The changes and matters agreed in the Deed also reflect:
 - (a) the intention that the Operator should make all efforts to be engaged by Snapper to support the Snapper System, including by becoming a 'Snapper Service Centre' and a "Snapper Retailer',
 - (b) the redeveloped and shared approach to revenue protection involving both the Operator and GWRC,
 - (c) the terms of the letter of agreement between the Operator and GWRC (dated on or about the date of this Deed) regarding changes to the roles of off board staff involved in ticket sales, and
 - (d) the terms of the letter of agreement between the Operaror, GWRC, and NZ Coach Services (dated on or about the date of this Deed) regarding the provision of alternative transport services,

Operative provisions

1. Definitions and interpretation

1.1 The Parties agree that the definitions and interpretation provisions set out at Schedule 1 (*Definitions and interpretation*) of this Deed apply unless the context requires otherwise.

2. Coming into effect of provisions

2.1 The provisions of this Deed shall come into effect on the Effective Date.

3. Amendments to the Partnering Contract

3.1 The Parties agree that, from the Effective Date, the Partnering Contract will be amended as set out at Schedule 2 (*Amendments to the Partnering Contract*) of this Deed.

4. Deed to comprise a Transaction Document

- 4.1 The Parties agree that this Deed shall constitute a Transaction Document for the purposes of the Partnering Contract.
- 4.2 Except to the extent that any obligations under any other Transaction Document are amended pursuant to this Deed:
 - 4.2.1 the obligations of each Party under this Deed are in addition to, and without prejudice to, their respective obligations under the Partnering Contract and any other Transaction Document to which they are party; and
 - 4.2.2 performance by a Party of any of its obligations under this Deed shall not relieve it from any of its other obligations under the Partnering Contract or any other Transaction Document.

5. Miscellaneous

No payment

The Operator acknowledges and agrees that, notwithstanding anything to the contrary contained in the Partnering Contract, it shall not be entitled to (and GWRC and GWRL shall not be liable for) any payment in connection with the execution of this Deed or the performance by the Operator of any of its obligations under this Deed, except as expressly provided for in Schedule 2 (*Amendments to the Partnering Contract*) of this Deed.

Notices

Any notice required to be given in relation to this Deed shall be given and deemed received in accordance with clause 72 (*Notices*) of the Partnering Contract.

Entire Agreement and amendments

- This Deed, the Partnering Contract and the other Transaction Documents contain the entire agreement between the Parties with respect to their subject matter and supersede any earlier agreements or understandings between the Parties in connection with their subject matter.
- This Deed may only be amended by way of a written agreement duly executed by each of the Parties.

No reliance

- 5.5 The Operator acknowledges that, before entering into this Deed, it made all enquiries it wanted to make in relation to the Operator's obligations under this Deed and that in entering into this Deed, the Operator:
 - 5.5.1 did not rely on any representation, warranty, guarantee, assurance, undertaking or other statement made by or on behalf of GWRC or GWRL; and
 - has made its own assessment of the rights provided to the Operator and the obligations imposed on the Operator by this Deed.

No waiver

- No waiver of any breach of, or failure to enforce any provision of, this Deed, nor any delay in exercising any right, power or remedy by a Party in any way affects, limits or waives the right of such Party thereafter to enforce and compel strict compliance with the provisions of this Deed. A single or partial exercise of any right, power or remedy does not preclude any other or further exercise of that or any other right, power or remedy.
- No waiver by a Party of any part of this Deed is binding unless it is made in writing by the Party granting that waiver.

Rights cumulative

5.8 Subject to any express provision in this Deed to the contrary, the rights, powers and remedies of a Party under this Deed are cumulative and are in addition to (and do not exclude or limit) any right, power or remedy provided by Law or equity or by any other agreement.

Further assurances

Each Party agrees to execute all deeds, instruments, transfers or other documents as may be necessary or desirable to give full effect to the provisions of this Deed.

No merger

5.10 The rights and obligations of the Parties shall not merge on the completion of any transaction contemplated by this Deed. The rights and obligations of the Parties will survive the execution and delivery of any assignment or other document entered into for the purposes of implementing any such transaction.

Costs and expenses

5.11 Subject to any express provision to the contrary in this Deed, each Party shall bear its own costs and expenses relating directly or indirectly to the negotiation, preparation, execution of and performance of its obligations under this Deed.

Severability of provisions

The illegality, invalidity or unenforceability at any time of any provision of this Deed under any Law will not affect the legality, validity or enforceability of the remaining provisions of this Deed nor the legality, validity or enforceability of those provisions under any other law.

Disputes

5.13 Any dispute, difference of opinion or disagreement between any of the Parties, including any Claim, arising out of or in connection with this Deed shall be resolved in accordance with clause 53 (*Dispute Resolution Procedure*) as if it were a Dispute under the Partnering Contract.

Governing law

5.14 This Deed and the transactions contemplated by this Deed are governed by and are to be construed in accordance with New Zealand law and, subject to clause 5.13 and the Dispute Resolution Procedure, the Parties irrevocably submit to the non-exclusive jurisdiction of the courts of New Zealand.

GWRC and **GWRL** action

- The Operator acknowledges that GWRC is the local authority in the region in which the Services are to be provided and that, notwithstanding anything to the contrary in this Deed, nothing in this Deed:
 - 5.15.1 requires GWRC, GWRL or any other Governmental Entity to exercise, or use, any regulatory or legislative powers in order to influence or affect an outcome; or

Deed of Variation: Snapper on Rail - Rail Partnering Contract PT0416

5.15.2 shall restrict or affect in any way the manner in which GWRC, GWRL or any other Governmental Entity may act in the exercise of its regulatory or legislative rights, powers and duties as a local authority.

Contract and Commercial Law Act 2017

5.16 Except to the extent any term of this Deed expressly states otherwise, a person who is not a Party to this Deed shall have no right under the Contract and Commercial Law Act 2017 to enforce any term of this Deed. This clause does not affect any right or remedy of any person which exists or is available otherwise than pursuant to that Act.

Incorporation of provisions from the Partnering Contract

5.17 Clauses 2 (GWRL's rights, powers and benefits), 73.1 and 73.2 (Relationship between Parties) and 74 (Requirement to use 'best endeavours') of the Partnering Contract apply to this Deed as if they were set out in it, provided that references in those provisions to "this Partnering Contract" shall be read as references to this Deed instead.

Counterparts

5.18 This Deed may be executed in any number of counterparts, all of which when taken together shall constitute one and the same instrument.

Guarantor acknowledgement

	(being and
	(Guarantor Acknowledgement) duly signed and dated by each of the Guarantors
	to GWRC an acknowledgement substantially in the form set out in Schedule 3
5.19	Within 5 Business Days following the date of this Deed, the Operator shall provide

	CONFIDENTIAL
Executed and delivered as a Deed:	
Wellington Regional Council by	Witnessed by
Sugar.	Man Top
Signature of attorney acting pursuant to a power of attorney dated 13 June 2019	Signature of witness
Samantha Louise Gain	Nicola Lay Young
Name of attorney	Name of witness
General Manager	Project Manager
Title of attorney	Occupation of witness
	56 Karepa St. Brosklyr. Address of witness
Greater Wellington Rail	
Limited by	

Signature of attorney acting pursuant to a power of attorney dated 4 May 2021

Samantha Louise Gain Name of attorney

General Manager

Title of attorney

Witnessed by

Signature of witness

Occupation of witness

CERTIFICATE OF NON REVOCATION OF POWER OF ATTORNEY

I, Smantha Louise Gain of Wellington, General Manager of Wellington Regional Council hereby certify:

- That by a Deed dated 13 June 2019, Wellington Regional Council appointed me as its Attorney on the terms and subject to the conditions set out in the said Deed.
- That at the date hereof I have not received any notice or information of the revocation of that appointment.

SIGNED at Wellington this (8th day of Movember 2022

Samantha Louise Gain

General Manager

Wellington Regional Council

CERTIFICATE OF NON REVOCATION OF POWER OF ATTORNEY

- I, Smanatha Louise Gain of Wellington, General Manager, hereby certify:
- That by a Deed dated 4 May 2021, Greater Wellington Rail Limited appointed me as its Attorney on the terms and subject to the conditions set out in the said Deed.
- 2. That at the date hereof I have not received any notice or information of the revocation of that appointment.

SIGNED at Wellington this lot day of Movember 2022

Samantha Louise Gain

General Manager

Wellington Regional Council

Transdev Wellington Limited

by:



Schedule 1 – Definitions and interpretation

Definitions

1. The following definitions apply to this Deed unless the context requires otherwise:

Effective Date	means 12 November 2022.
Parties	means the parties to this Deed.
Partnering Contract	means the partnering contract (reference PT 0416) for the Greater Wellington Rail Service made between GWRC, GWRL and the Operator and dated 10 March 2016.

2. Unless otherwise defined in this Deed, capitalised terms have the meaning given to them in the Partnering Contract.

Interpretation

- 3. Unless the context requires otherwise, paragraphs 2.1 to 2.5 and 2.8 to 2.22 of Schedule 1 (*Definitions and Interpretation*) of the Partnering Contract apply to this Deed as if they were set out in it.
- 4. The following rules apply unless the context requires otherwise:
 - 4.1. a reference to a clause, schedule, attachment, annexure or appendix is a reference to a clause of or a schedule, attachment, annexure or appendix to, this Deed, and a reference to a paragraph is to a paragraph of the same clause, schedule, attachment, annexure or appendix unless the context requires otherwise; and
 - 4.2. a reference to an agreement or document (including a reference to this Deed or the Partnering Contract) is to the agreement or document as amended, varied or supplemented, novated or replaced, except to the extent prohibited by this Deed, the Partnering Contract or that other agreement or document.

Consents or approvals

5. If the doing or any act, matter or thing under this Deed is dependent on the consent or approval of a Party or is within the discretion of a Party, the consent or approval may be given or the discretion may be exercised conditionally or unconditionally or withheld by the Party at its absolute discretion unless express provision to the contrary is made.

Schedule 2 – Amendments to the Partnering Contact

Amendments to Schedule 1 (Definitions and Interpretation)

- 1. The definition of Transaction Document in Schedule 1 of the Partnering Contract shall be amended to include reference to this Deed.
- 2. The following definitions at Schedule 1 of the Partnering Contract are **deleted and** replaced as set out below:

ETS Implementation Date	means:	initially, in regard to the Snapper System, the Snapper Implementation Date; and
	(b)	subsequently, in regard to the NTS, the NTS Implementation Date.
IFT Phase Two		ne period from and including the NTS Implementation il the Termination Date.
IFT Programme	i	ne initial electronic and subsequent integrated fares eting programme described at Schedule 13 (<i>IFT</i> ame).
IFT System	means:	
	(a)	from and including the Snapper Implementation Date until and including the IFT Programme Phase One Expiry Date, the Snapper System; and
	(b)	from and including the NTS Implementation Date, the NTS.
IFT System Equipment	(a)	from and including the Snapper Implementation Date until and including the NTS Implementation Date, means the Snapper validators and shields installed at stations and Ticket Offices, , and all other equipment, systems, assets, devices or apps forming part of the Snapper System (including the Operator IFT System Equipment) and the Snapper Ticketing Equipment, and
	(b)	from and including the NTS Implementation Date, means the NTS equipment installed at stations, Ticket Offices, and in Vehicles (including alternative transport vehicles), and all other equipment, systems, assets, mobile phones and other

Deed of Variation: Snapper on Rail - Rail Partnering Contract PT0416

	devices or apps forming part of the NTS (including the Operator IFT System Equipment).
IFT Programme Phase One Expiry Date	means the day falling immediately prior to the NTS Implementation Date.
IFT Implementation Date	means the date on which the integrated fares and ticketing system known as NTS first becomes operational and available for use by passengers on one or more Lines making up the Rail Unit.
IFT System Provider	means: (a) in the case of the Snapper System, Snapper Services Limited; and (b) in the case of the NTS, the person(s) selected by the Transport Agency or GWRC to provide and install the NTS.
Operator IFT System Equipment	means: (a) in regard to the Snapper System, the iphones and any other hand held devices used by the Operator forming part of the Snapper System; and (b) in regard to the NTS, all iphones and any other hand held devices used by the Operator forming part of the NTS.
Pre Priced Option	means the RS1 Project Pre Priced Option.

3. The following **new** definitions are added at Schedule 1 of the Partnering Contract:

Effective Date (Deed of Variation: Snapper on Rail)	means [12 November 2022].
HTS	means HTS Group, a subcontractor appointed by Snapper to install and maintain the Snapper Ticketing Equipment.
NTS	means the national ticketing system that is being procured by the Transport Agency.
NTS Implementation Date	means the later of:

	(a) the date to be determined by GWRC in accordance with the provisions at paragraph 3.4.1 of Schedule 13 (IFT Programme); and (b) the date on which the NTS first becomes operational and available for use by passengers in respect of all Scheduled Services forming part of the Rail Unit Timetable.	
Revenue Protection and Customer Service Plan	means the plan contemplated by paragraph 1.3.12 of Appendix 1 (<i>Plans</i>) to Schedule 5, as updated or replaced from time to time in accordance with this Partnering Contact.	
Snapper Implementation Date	means the later of: (a) the Effective Date (Deed of Variation: Snapper on Rail); and	
	(b) the date the Snapper System extension actually goes live and is available for use by passengers in respect of all Scheduled Services on the Kapiti Line.	
Snapper	means Snapper Services Limited.	
Snapper Implementation Fee Change Date	means the later of: (a) the Snapper Implementation Date; and (b) 1 January 2023.	
Snapper Pilot	means the pilot of the Snapper System undertaken on the Johnsonville Line commencing November 2021 and ending on the Snapper Implementation Date.	
Snapper System	means the electronic ticketing as a service solution known as "Snapper" procured by GWRC from Snapper.	
Snapper Ticketing Equipment	means the on vehicle equipment and support systems to be installed in vehicles used for the provision of alternative transport services to enable use of the Snapper System by passengers using such vehicles during Planned Disruption and Unplanned Disruption.	

4. The definitions of IFT Programme Implementation Fee and IFT Programme Pre Priced Option contained in Schedule 1 of the Partnering Contract are deleted and are not replaced.

Amendments to head Agreement

- 5. The Partnering Contract is amended by:
 - 5.1. amending clause 12.1.7 (General) to read: on and from each ETS
 Implementation Date, using the applicable IFT System Equipment provided by
 GWRC in accordance with clause 20 (GWRC Provision of Wellington Station,
 GWRC Assets and GWRC Systems); and...
 - 5.2. deleting clause 15.2 and replacing it as follows:
 - 15.2 Without limiting clause 15.1:
 - 15.2.1 prior to the Snapper Implementation Date, and on and from the Snapper Implementation Date:
 - (a) GWRC shall provide training, or procure that training is provided, to not more than 5 employees of the Operator on the functions of the Snapper System, including in relation to customer service and revenue protection, to enable these employees to provide training to the Services Employees on the use of the Snapper System including (as required) on use of the revenue protection app and the Snapper Ticketing Equipment installed in alternative transport vehicles;
 - (b) the Operator shall procure that the employees who have completed the Snapper System training referred to in clause 15.2.1(a) provide training on the functions of the Snapper System, including customer service and revenue protection, to all relevant Services Employees prior to those Services Employees being in a customer-facing role:
 - (c) GWRC shall provide the Operator with the relevant training materials;
 - (d) GWRC shall also procure that Snapper provides training to the trainers of alternative transport operators contracted by the Operator to provide alternative transport services, such training to be provided to operators that have not previously used vehicles that have Snapper Ticketing Equipment installed; and
 - 15.2.2 prior to the NTS Implementation Date, GWRC and the Operator shall review and agree (by approval of a Variation

Order or deed of variation) how any additional training on the functions of the NTS will be provided or procured.

5.3. deleting sub-clauses 48.1 to 48.26 from within clause 48 (*Fare Revenue and other Revenue*) and replacing those sub-clauses as follows:

48. Farebox Revenue and other Revenue

Farebox Revenue and ticket sales

- 48.1 The Parties agree that:
 - 48.1.1 as part of GWRC's obligation to provide public transport services for the Wellington region, GWRC hereby appoints the Operator to sell tickets and collect Farebox Revenue as agent for GWRC in accordance with this clause 48 and Annexure 6 (Fares, Ticketing and Enforcement Requirements) and the Operator hereby accepts such appointment;
 - 48.1.2 GWRC authorises the Operator to appoint the Ticket Agents as sub-agents of the Operator on the terms of the Ticket Agent Agreements; and
 - 48.1.3 the following clauses (inclusive) shall apply in regard to Farebox Revenue:
 - (a) at all times from the Commencement Date, clauses 48.1 to 48.3A, clauses 48.14 to 48.26 inclusive and clause 48.32:
 - (b) from the Commencement Date up to and including the Snapper Implementation Date, clauses 48.4 to 48.8 inclusive; and
 - (c) on and from the Snapper Implementation Date until the Termination Date, clauses 48.9 to 48.13 inclusive.
- 48.2 The Operator shall bear all costs and expenses relating directly or indirectly to compliance with its obligations under this clause 48 and Annexure 6 (Fares, Ticketing and Enforcement Requirements), including bank charges, staff costs (including the cost of complying with its obligations under clause 48.3.6) and, up to and including the day prior to the Snapper Implementation Date, credit card fees and commission payable to Ticket Agents.
- 48.3 The Operator shall:
 - 48.3.1 sell fares on the terms and conditions set out in, and shall otherwise comply with, Annexure 6 (Fares, Ticketing and Enforcement Requirements);

- 48.3.2 ensure that the availability and accessibility of fares is not reduced and not offer fares for sale other than those referred to in Annexure 6 (Fares, Ticketing and Enforcement Requirements), unless otherwise agreed by GWRC in writing;
- 48.3.3 ensure that fares sold in printed form are branded in the form specified by GWRC;
- 48.3.4 ensure that the Operator Associates do not commit a Ticket Offence;
- 48.3.5 provide free rail travel for all of the Operator's employees engaged in providing Services and the Vehicle Services Subcontractor's employees engaged in providing Vehicle Services, travelling in uniform or holding a valid staff pass to and from work on Scheduled Services or on Special Event Services to the extent required by a relevant collective agreement or individual employment agreement; and
- 48.3.6 provide any additional travel benefits other than the free travel described at clause 48.3.5 for all of the Operator's employees to the extent required by a relevant collective agreement or individual employment agreement.
- 48.3A In respect of free travel entitlements described at clause 48.3.5, the Parties agree that the Operator is not required to pay GWRC the cost of providing tickets to its employees and the Vehicle Services Subcontractor's employees, for the purposes of complying with clause 48.3.5 but the Operator shall be responsible to meet the cost of (and where applicable pay GWRC) for any other travel benefits provided under clause 48.3.6.

Collecting Farebox Revenue up to and including the Snapper Implementation Date

- 48.4 The Operator shall comply with its ticketing obligations set out in Annexure 6 (Fares, Ticketing and Enforcement Requirements).
- 48.5 The Operator shall ensure that all Farebox Revenue either received by the Operator or any Operator Associate (including by way of cash payment, cheque and electronic payment) or to be paid to GWRC under clause 48.3A is:
 - 48.5.1 deposited into the Farebox Account in accordance with such reasonable procedures as GWRC may from time to time notify to the Operator and:
 - (a) in the case of Farebox Revenue received by the Operator or any Operator Associate (excluding the

Ticket Agents), as soon as reasonably practicable and in any event by 10 a.m. on the next Business Day after such Farebox Revenue is received, provided that if Farebox Revenue is collected by way of electronic payment, the Operator shall ensure that such payments shall be paid into the Farebox Account directly and immediately; or

- (b) in the case of Farebox Revenue received by any Ticket Agent, as soon as received by the Operator from a Ticket Agent which must be at the latest on or prior to the last Business Day of the month in which the Farebox Revenue is collected by the Ticket Agent;
- 48.5.2 kept safe, secure and separate from any other moneys until the time at which it is deposited into the Farebox Account pursuant to clause 48.5.1; and
- 48.5.3 deposited into the Farebox Account in accordance with this clause 48.5 without setting off or deducting any amounts, including any costs or expenses referred to in clause 48.2.

Transfer of balance of the Farebox Account up to and including the Snapper Implementation Date

- 48.6 Before 4.00 pm on each Business Day, the Operator shall transfer to GWRC from the Farebox Account, as a same day cleared payment:
 - 48.6.1 if the Operator has provided a Daily Farebox Report that day in accordance with its obligations under Schedule 5 (Planning, Reporting and Meetings), the amount specified in that Daily Farebox Report as being the total amount to be paid to GWRC from the Farebox Account; or
 - if the Operator has not provided a Daily Farebox Report in accordance with its obligations under Schedule 5 (Planning, Reporting and Meetings), the average daily value of tickets sold by the Operator and the Operator Associates during the preceding calendar month (or, in the case of the first Relevant Month, GWRC's reasonable estimate of the daily value of tickets sold by the Operator and the Operator Associates) multiplied by the number of days for which a Daily Farebox Report should have been provided. If any Daily Farebox Report is incorrect or misleading in any way (including resulting from mistake, fraud or otherwise) (such matter being an "Error") resulting in GWRC not being paid

the full amount in respect of unaccounted for tickets or Farebox Revenue from the Farebox Account at any time:

- (a) the Operator shall pay to GWRC on demand the amount of the shortfall plus interest thereon calculated at the Default Rate from (and including) the day after the date on which the Error arose until (and including) the actual date that GWRC receives payment; and
- (b) without prejudice to any other rights or remedies of GWRC under this Partnering Contract (including the right to make Reporting Failure Deductions in accordance with Schedule 6) at GWRC's election the Operator shall pay to GWRC on demand the sum of sum in respect of each such Error.
- 48.7 Not used.
- 48.8 The Parties acknowledge and agree that:
 - 48.8.1 the amount referred to in clause 48.6.2(b) is a genuine preestimate of the damages, costs and losses (including administrative costs) that may be incurred by GWRC in connection with an Error and that such amount has been agreed by the Parties in good faith;
 - 48.8.2 the Parties wish to avoid the difficulty of calculation of damages, costs and losses in connection with an Error;
 - 48.8.3 payment by the Operator of such amount is reasonable and is not intended to be a penalty; and
 - 48.8.4 to the maximum extent permissible by Law, the Operator hereby unconditionally and irrevocably 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 non-enforceability of clause 48.6.2(b) or the characterisation thereof as a penalty.

Collecting Farebox Revenue on and from the Snapper Implementation Date

48.9 From the Snapper Implementation Date the Operator shall only sell cash tickets as set out in the GWRC Fare Media Transition Plan (as provided at Annexure 6 (Fares, Ticketing and Enforcement Requirements)) and as required to provide tickets for Operator employees in accordance with clause 48.3.6. All other ticket sales shall be made via the Snapper System.

- 48.10 The Operator shall ensure that all Farebox Revenue received by the Operator or any Operator Associate by way of cash payment for ticket sales or any other tickets sales approved in writing by GWRC is:
 - 48.10.1 deposited into the Farebox Account as soon as reasonably practicable and in any event by 10.00 am on the next Business Day after such Farebox Revenue is received by the Operator or any Operator Associate, in accordance with such reasonable procedures as GWRC may from time to time notify to the Operator;
 - 48.10.2 kept safe, secure and separate from any other moneys until the time at which it is deposited into the Farebox Account pursuant to clause 48.10.1;
 - 48.10.3 deposited into the Farebox Account in accordance with this clause 48.10 without setting off or deducting any amounts, including any costs or expenses referred to in clause 48.2; and
 - 48.10.4 from the NTS Implementation Date (if required) recorded on the Operator IFT System Equipment.
- 48.11 The Operator shall collect all cash payments for tickets sold by the Operator or an Operator Associate for travel on vehicles providing alternative transport arrangements which replace disrupted Scheduled Services or Special Event Services and ensure that such amounts are deposited to the Farebox Account in accordance with clause 48.10.
- 48.12 [Not used].

Transfer of balance of the Farebox Account on and from Snapper Implementation Date

48.13 The Parties agree that before 4.00 pm on each Business Day (or at such other frequency approved in writing by GWRC), the Operator shall transfer to GWRC from the Farebox Account, as a same day cleared payment the amount referred to in the Daily Farebox Report (or such alternative form of report approved in writing by GWRC).

Operation of the Farebox Account and dealing with Farebox Revenue

- 48.14 The Operator shall ensure that at all times the balance of the Farebox. Account is sufficient to enable the Operator to transfer to GWRC the amounts referred to in clauses 48.6 and 48.13.
- 48.15 If the Operator has failed to comply with clause 48.14, the Operator shall pay to GWRC on demand simple interest at the Default Rate on the difference between the amount which GWRC is entitled to receive from the Operator pursuant to clause 48.6 or 48.13 (as applicable) and the amount actually paid pursuant to clause 48.6 or 48.13 (as

applicable). Such interest shall accrue from and including the date on which GWRC is entitled to receive the relevant amount pursuant to clause 48.6 or 48.13 (as applicable) until and including the date on which the Operator has paid sufficient additional funds (not comprising Farebox Revenue subsequently received by the Operator or Operator Associates and payable into the Farebox Account in accordance with this clause 48) into the Farebox Account to make up the shortfall, transferred the amount owing to GWRC and has notified GWRC in writing that it has done so.

- 48.16 The Operator shall not (and shall procure that the Operator Associates shall not):
 - 48.16.1 pay the Farebox Revenue into any account other than the Farebox Account;
 - 48.16.2 Not used;
 - 48.16.3 dispose of, assign, transfer or otherwise deal with the Farebox Revenue in any manner other than that contemplated by this clause 48;
 - 48.16.4 make any withdrawals or transfers from the Farebox Account except to the extent permitted by this clause 48;
 - 48.16.5 Not used;
 - 48.16.6 pay any amount into the Farebox Account other than Farebox Revenues and the additional funds referred to in clause 48.15;
 - 48.16.7 use the Farebox Account for any purpose other than that contemplated by this clause 48;
 - 48.16.8 permit the balance of the Farebox Account to fall below zero;
 - 48.16.9 close, transfer or seek to close or transfer the Farebox Account at any time except as required by clause 48.18.1; or
 - 48.16.10 create any Security Interest over the Farebox Account (including its proceeds) or over any or all of the Farebox Revenue, or permit such Security Interest to be created or to subsist at any time.
- 48.17 The Operator shall ensure that the bank with which the Farebox Account is held is an Approved Bank. If at any time during the Term such bank ceases to be an Approved Bank, the Operator shall:
 - 48.17.1 promptly notify GWRC of that circumstance; and

- 48.17.2 within 5 Business Days of such circumstance occurring, open a new bank account with a bank which is an Approved Bank.
- 48.18 On the date on which a new bank account is opened pursuant to clause 48.17.2:
 - 48.18.1 the Operator shall:
 - (a) provide written details of the new bank and the new account (including account number and local clearing code) to GWRC;
 - (b) transfer the balance of the Redundant Farebox Account to that new bank account;
 - (c) not used;
 - (d) close the Redundant Farebox Account; and
 - 48.18.2 the new account shall become the Farebox Account for the purposes of this Partnering Contract in place of the Redundant Farebox Account and shall be operated in accordance with the provisions of this clause 48.
- 48.19 The Operator shall be responsible for paying any fee, fine or other penalty in connection with the Farebox Account (including any Redundant Farebox Account). To the extent that any such fee, fine or other penalty is deducted from the balance of the Farebox Account, the Operator shall immediately pay the amount of such deduction into the Farebox Account.
- 48.20 Without prejudice to the Operator's obligations to transfer from the Farebox Account to GWRC in accordance with this clause 48, to the extent that:
 - 48.20.1 any interest accrues on the balance of the Farebox Account; and
 - 48.20.2 the Operator is not obliged to transfer the amount of such interest from the Farebox Account to GWRC in accordance with this clause 48,

the Operator shall be entitled to such interest.

Farebox Revenue held on trust

- 48.21 The Operator acknowledges and agrees that all Farebox Revenue is the absolute property of GWRC and that the Operator holds such Farebox Revenue as bare trustee at all times for GWRC (whether such Farebox Revenue has been paid into the Farebox Account or not).
- 48.22 In the event that any or all of the Operator's obligations in respect of the collection of Farebox Revenue are subcontracted to any person

(whether by the Operator or by any subcontractor of any tier) or the collection of Farebox Revenue is undertaken by Ticket Agents other than Ticket Agents appointed under the Ticket Agent Agreements, the Operator shall ensure that each such subcontract (of any tier) or agreement with the Ticket Agent (as applicable) shall contain a provision whereby the relevant subcontractor or Ticket Agent (as applicable) acknowledges and agrees that all Farebox Revenue is the absolute property of GWRC and that the subcontractor or Ticket Agent (as applicable) holds such Farebox Revenue as bare trustee at all times for GWRC.

Ticket Agents

- 48.23 Prior to the Commencement Date, the Operator shall duly execute and deliver a Ticket Agent Agreement with each of the Ticket Agents substantially in the form set out in Annexure 21(Ticket Agent Agreement).
- 48.24 The Operator shall terminate each Ticket Agent Agreement in accordance with its terms on the day falling immediately before the Snapper Implementation Date or on such later date agreed in writing by GWRC.
- 48.25 Except as provided for in clause 48.24, the Operator shall not:
 - 48.25.1 make any modification, variation or amendment of a material nature to, or terminate or surrender; or
 - 48.25.2 permit the novation, assignment or substitution of any counterparty's right, obligation or interest in,

any Ticket Agent Agreement, or enter into any new agency relationship in respect of the Operator's obligations under this Partnering Contract, without GWRC's prior written consent.

Provision of information to GWRC

- 48.26 Without prejudice to any other obligations of the Operator, within 3 Business Days following a request therefor, the Operator shall provide to GWRC (on an Open Book Basis) such information as GWRC may reasonably request from time to time:
 - 48.26.1 to evidence the gross amount of Farebox Revenue received by the Operator or any Operator Associate;
 - 48.26.2 to evidence the amounts deposited from time to time into the Farebox Account;
 - 48.26.3 to evidence the type of fares sold broken down by:
 - (a) description of fares sold;
 - (b) numbers of fares sold;

- (c) the amount and nature of any agency or other fees (if any) deducted in relation to the fares sold; and
- (d) any other information required by GWRC for accounting of GST purposes;
- 48.26.4 to evidence the net amount of Farebox Revenue transferred from the Farebox Account to GWRC by the Operator in accordance with this clause 48; and/or
- 48.26.5 to verify the extent to which the Operator has complied and is complying with this clause 48.

Amendments to Schedule 3 (Passenger Services)

- 6. The following amendments are made to Schedule 3 (*Passenger Services*):
 - 6.1. Paragraphs 3.13 and 3.14 are deleted and replaced as follows:
 - 3.13 In respect of each vehicle used to provide alternative transport arrangements, the Operator shall:
 - 3.13.1 ensure that:
 - (a) such vehicle meets the requirements of, and is operated in accordance with, all applicable Law;
 - (b) such vehicle is operated by a Licenced Operator; and
 - (c) the recommended passenger load limits for such vehicle are not exceeded; and
 - 3.13.2 after the ETS Implementation Date use best endeavours to procure that each vehicle is IFT Compatible.
 - 3.13A GWRC shall assist the Operator (at GWRC's cost) to provide alternative transport using IFT Compatible vehicles by GWRC procuring and installing Snapper Ticketing Equipment on up to 28 vehicles that the Operator has procured for the provision of alternative transport, provided that the Operator shall ensure that each contract for the use of such vehicles:
 - 3.13A.1 is procured (in the case of contracts in place on, or from the Snapper Implementation Date, for a term that expires by 30 September 2023 and subsequently for terms of at least 12 months (and that a copy of the amended or new contract is provided to GWRC upon request),
 - 3.13A.2 provides (if the vehicles are not equipped with Snapper Ticketing Equipment) for such vehicles to be made available for the installation and de installation of Snapper Ticketing

- Equipment and subsequently for the repair and maintenance of the Snapper Ticketing Equipment, and (when no longer required for the provision of alternative transport services) for the de-installation of the Snapper Ticketing Equipment,
- 3.13A.3 requires that the operator of such vehicles to ensure that drivers, maintenance and workshop staff and others with access to the vehicles on which the Snapper Ticketing Equipment is installed do not connect or interface the Snapper Ticketing Equipment, or any wiring associated with the Snapper Ticketing Equipment, to any other equipment or connections without GWRC's prior written consent,
- 3.13A.4 requires the operator of such vehicles to comply with any guidelines provided by GWRC from time to time in regard to the operation, security, storage, cleaning and maintenance of the Snapper Ticketing Equipment,
- 3.13A.5 requires the operator of such vehicles to ensure that the Snapper Ticketing Equipment installed is looked after and kept secure in accordance with good industry practice and any guidelines provided by GWRC,3.13A.6 requires that the operator ensures that drivers using the vehicles that have Snapper Ticketing Equipment installed have attended training so that they understand how to care for and use the Snapper Ticketing Equipment and report any faults to the maintenance workshop staff,
- 3.13A.7 requires that the operator ensures that maintenance workshop staff working on the vehicles that have Snapper Ticketing Equipment installed understand how to either resolve, or report any problems, initially to Snapper and subsequently (if not resolved) to GWRC,
- 3.13A.8 requires that the operator ensures that maintenance workshop staff (when required to do so) work with HTS (or any alternative sub-contractor appointed by Snapper) to rectify faults in the Snapper Ticketing Equipment,
- 3.13A.9 requires the operator to ensure that Snapper Ticketing
 Equipment spares (if any) provided to the operator are kept
 safe and secure and returned to Snapper, HTS or GWRC as
 required,
- 3.13A.10 requires the operator to immediately report to the Operator, GWRC and Snapper all damage to and faults in the Snapper Ticketing Equipment and provide assistance and information requested to assist in investigating such damage and faults,

- 3.13A.11 requires the operator to ensure that use of the Snapper portal used by the operator's staff is limited to named individuals and that the trip and fares data recorded via the portal is the property of GWRC,
- 3.13A.12 requires the operator to ensure that its secured lenders or any third party owners of the vehicles that have Snapper Ticketing Equipment installed understand that the Snapper Ticketing Equipment installed on such vehicles has been paid for by GWRC, but is owned by Snapper as the Snapper System provider,
- 3.13A.13 provides that GWRC has the right to request the return of the Snapper Ticketing Equipment (excluding cabling) and any spares, at any time without delay (including in the event of the liquidation or receivership of the operator of the vehicle or any third part owner of the vehicle),
- 3.13A.14 provides that, unless the vehicle forms part of an existing PTOM Operator's fleet, that the Snapper Ticketing Equipment must be removed from the vehicle and returned to GWRC either at the end of the relevant contract or if the alternative transport operator no longer requires the vehicle for the provision of alternative transport services,
- 3.13A.15 provides for GWRC to enforce the provisions that have been included in the contract for the benefit of GWRC, Snapper or HTS, and
- it is agreed between GWRC and the Operator that such agreements between the Operator and the alternative transport providers are Transaction Documents for the purposes of the Partnering Contract.
- 3.14 Without prejudice to the Operator's obligations pursuant to paragraph 3.13.2, the Operator shall, in the case of IFT Compatible vehicles ensure that Operator staff sell cash fares to any customers that do not have Snapper cards, ensure that the Snapper Ticketing Equipment (or any replacement IFT System Equipment) is turned on and ready for use so that customers are able to tag on and off the vehicle, that customers boarding tag on, and that the driver is checking that all customers either tag on or have purchased a paper ticket prior to boarding.
- 6.2. in paragraph 3.62, the reference to "the IFT Programme Phase One Expiry Date" will be replaced with a reference to "the Snapper Implementation Date";
- 6.3. by inserting the following new paraghaph 3.65A:

- 3.65A The Operator shall ensure that onboard and off board staff are retrained and redeployed with the intention that such staff are equipped to:
 - (a) provide customers with effective and proactive assistance to customers regarding use of the Snapper System
 - (b) provide the agreed range of enhanced customer facing services set out in the Revenue Protection and Customer Service Plan.
- 7. The following PIs at the end of section 7 are deleted and replaced as set out below:
 - 7.1. **PI #10 (Passenger Load Factor Peak a.m. Service)** is amended by changing Data source in the third row of the table, as set out below:

Data source	(i)	Monthly Operational Report;
	(ii)	the passenger count undertaken by the Operator's on board staff noting that manual counts will continue until GW confirms that automatic passenger counting systems are capable of undertaking this count

7.2. **PI #11 (Passenger Load Factor – Peak p.m. Service)** is amended by change the data source in the third row of the table, as set out below:

Data source	(i)	Monthly Operational Report;
	(ii)	the passenger count undertaken by the Operator's on board staff noting that manual counts will continue until GW confirms that automatic passenger counting systems are capable of undertaking this count

7.3. **PI # 13** is amended by changing the heading and the description of the Purpose in the first two rows of the table as set out below:

P1#13	Revenue Protection for IFT Phase One prior to Snapper Implementation Date	
Purpose	To identify whether the Operator is complying with its revenue protection obligations in paragraph 3.60 to 3.62 of this Schedule 3	
	This PI#13 applies from the Commencement Date until the Snapper Implementation Date	

7.4. **PI #14** (Revenue Protection for IFT Phase Two) is deleted.

Amendments to Schedule 5 (Planning, Reporting and Meetings)

8. Paragraph 3.1.6 (Daily Farebox Report) is deleted and replaced as follows:

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3.1.6 Daily Farebox Report:

- (a) number of tickets sold during that day (and all previous days for which a Daily Farebox Report has not been provided) (including tickets sold by Ticket Agents where Farebox Revenue has been receipted by the Operator) by ticket description and type;
- (b) aggregate face value of tickets sold during that day (and all previous days for which a Daily Farebox Report has not been provided)

 (Face Value of Tickets Sold) and a breakdown of this amount by ticket description and type (including tickets sold by Ticket Agents where Farebox Revenue has been receipted by the Operator);
- (c) aggregate amount of refunds provided (if any) during that day (and all previous days for which a Daily Farebox Report has not been provided) in accordance with the terms of the Annexure 6 (Fares, Ticketing and Enforcement Requirements) (including refunds provided by Ticket Agents that have not been previously reported in a Daily Farebox Report) (Refunds Provided);
- (d) any tickets unaccounted for (lost, stolen, etc.) and the aggregate face value of such tickets (to the extent not included in a previous Daily Farebox Report) (Face Value of Tickets Unaccounted For);
- (e) total value of ticket sales to be transferred from the Farebox Account (Total Value), being:

 $Total\ Value = A + B - C$

Where:

 $A = Face \ Value \ of \ Tickets \ Sold;$

 $B = Face \ Value \ of \ Tickets \ Unaccounted \ For;$

C = Refunds Provided.

- (f) any other information required by GWRC for accounting or GST purposes;
- 9. Paragraph 3.1.9 (Monthly Farebox Report) is deleted and replaced as follows:

3.1.9 Monthly Farebox Report:

- (a) aggregate data from each Daily Farebox Report for the Relevant Month;
- (b) aggregate face value of tickets sold by Ticket Agents during that Relevant Month and a breakdown of this amount by ticket description and type;
- (c) "SuperGold" passenger journeys for the Relevant Month;

- (d) value of accrual required for tickets sold in advance as at the first day of the Relevant Month but not yet used;
- (e) value of accrual required for tickets sold by Ticket Agents but not yet receipted by the Operator; and
- (f) the value of tickets provided by the Operator in order to comply with its obligations in respect of free staff travel under clause 48.3.5;
- 10. Paragraph 1.3.12 (Revenue Protection Plan) at Appendix 1 (Plans) is deleted and replaced as follows, and all other references to the "Revenue Protection Plan" are amended to refer to the "Revenue Protection and Customer Service Plan":
 - 1.3.12 (Revenue Protection and Customer Service Plan): a plan detailing the revenue protection and customer service procedures that shall be implemented by the Operator in respect of the Scheduled Services and Special Event Services in the forthcoming Year in order to reduce the number of Ticket Offences and to enhance the service provided to passengers, such plan to:
 - (a) be in accordance with Good Industry Practice;
 - (b) be consistent with the GWRC Revenue Protection Strategy and prepared in consultation with GWRC; and
 - (c) include as a minimum:
 - (i) proposed number of Operator revenue protection officers on board Vehicles and the proposed number of GWRC warranted officers on board Vehicles;
 - (ii) Operator revenue protection staff deployment strategy;
 - (iii) minimum number of onboard Operator Snapper System validations and cash ticket inspections to be undertaken per Scheduled Service; and
 - (iv) proposed Operator actions to be taken to address specific revenue protection issues;

Amendments to Schedule 6 (Financial and Performance Regime)

11. Schedule 6 (*Financial and Performance Regime*) is deleted and replaced with a new Schedule 6 (*Financial and Performance Regime*) attached at Attachment One of this Schedule 2.

Amendments to Schedule 9 (Stations and Depot Facilities)

12. Schedule 9 (*Stations and Depot Facilities*) is amended by deleting table below paragraph 7.1 (*Cleaning Obligations*) and inserting the following table:

Station / Depot Facility	Area	Party responsible	Cleaning standard to be met (if applicable)
Wellington Station	Common areas (including platforms)	GWRC, and a share of the costs passed back to KiwiRail	The standard specified in GWRC's relevant cleaning contract
	"Metro" areas shown shaded brown on the Wellington Station Plan attached at Appendix 1 (Wellington Station Access Areas Plan).	GWRC	The standard specified in GWRC's relevant cleaning contract
	IFT System devices (from the ETS Implementation Date)	GWRC	The standard specified in GWRC's relevant cleaning contract
	Bike parks shaded green on the Wellington Station Plan attached at Appendix 1 (Wellington Station Access Areas Plan).	GWRC	The standard specified in GWRC's relevant cleaning contract
	Server Room shaded blue on the Wellington Station Plan attached at Appendix 1 (Wellington Station Access Areas Plan).	KiwiRail as lessor of the Wellington Station Lease (cost to be passed on and paid by GWRC as lessee)	The standard specified in KiwiRail's relevant cleaning contract
Stations (excluding Wellington Station)	Common areas (including platforms)	GWRL	The standard specified in GWRL's relevant cleaning contract
	"Operator" areas shaded orange on Appendix 3 (Station Access Areas Plans (excluding Wellington Station)).	GWRL	The standard specified in GWRL's relevant cleaning contract
	"GWRC" areas shaded green on Appendix 3 (Station Access Areas Plans (excluding Wellington Station)).	GWRL	The standard specified in GWRL's relevant cleaning contract

	Access Provider areas marked "Networks" and shaded blue on Appendix 3 (Station Access Areas Plans (excluding Wellington Station)).	Access Provider	The standard specified in the Access Provider's relevant cleaning contract
	IFT System devices (from the ETS Implementation Date	GWRL	The standard specified in GWRL's relevant cleaning contract
EMU Depot	"Operator" areas shaded orange on Appendix 4 (EMU Depot Access Areas Plan).	Operator	Good Industry Practice and standard satisfactory to GWRL
	GWRL "Project Space" shaded green on Appendix 4 (EMU Depot Access Areas Plan)	Operator	Good Industry Practice and standard satisfactory to GWRL
Carriage Depot	Carriage Depot Access Areas	Operator (unless a separate cleaning arrangement is agreed in writing between the Operator and KiwiRail)	In a manner and to a standard that ensures that GWRL as licensee is not in breach of the obligations at clause 7.16 of the Carriage Licence

Amendments to Schedule 13 (IFT Programme)

13. Schedule 13 (*IFT Programme*) is deleted and replaced with a new Schedule 13 (*IFT Programme*) attached at Attachment Two of this Schedule 2.

Amendments to Schedule 16 (Change Events and Net Financial Impact)

- 14. Section 4 (*Pre Priced Options*) is amended by deleting all references to the IFT Programme Pre-Priced Option, by:
 - 14.1. deleting paragraph 4.1.2;
 - 14.2. at paragraph 4.2, deleting the word "relevant", the words "Schedule 13 (IFT Programme) or" and the words "(as applicable)";
 - 14.3. deleting paragraph 4.4; and
 - 14.4. at paragraph 4.5.3(b), deleting the words "or the payment of the IFT Programme Implementation Fee in accordance with paragraph 4.4 (as applicable)".

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15. Paragraph 10.3.2 (*Rail Unit Timetable changes*) is amended by deleting the words "or the IFT Programme Implementation Fee as applicable".

Amendments to Schedule 18 (Operator's Proposals)

16. Paragraph 2.6.3 of Schedule 18 is deleted.

Amendments to Annexure 6 (Fares, Ticketing and Enforcement Requirements)

- 17. Annexure 6 (*Fares, Ticketing and Enforcement Requirements*) is deleted and replaced with a new Annexure 6 (*Fares, Ticketing and Enforcement Requirements*), attached at Attachment Three of this Schedule 2.
- 18. Paragraph 3.1 of Annexure 6 (*Fares, Ticketing and Enforcement Requirements*) requires that any changes to the requirements of Annexure 6 occur in accordance with the change process for PT Network Documents set out in the Regional Agreement. As the changes to Annexure 6 only apply to the Rail Unit the Parties have agreed, in this instance, to waive the requirement that the changes occur in accordance with the change process for PT Network Documents.

Attachment One – new Schedule 6 (Financial and Performance Regime)

Schedule 6

Financial and Performance Regime

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1 Services Fee

- 1.1 The Services Fee comprises:
 - 1.1.1 the following monthly amounts:
 - (a) the Passenger Services Fee;
 - (b) the Vehicle Services Fee;
 - (c) the Additional Vehicle Services Fee;
 - (d) the Special Event Services Fee;
 - (e) the Vehicle Availability Payment;
 - (f) the Alternative Transport Fee;
 - (g) the Locomotive Services Fee;

less (subject to clause 45.1 (GWRC's and GWRL's rights of set off)):

- (h) Performance Deductions in relation to the Reliability KPI and the Punctuality KPI;
- (i) Reporting Failure Deductions;
- 1.1.2 the following half yearly amounts:
 - (a) the Customer Satisfaction Payment; and
 - (b) the Performance Payment; and
- 1.1.3 the FIM Adjustment annually.
- 1.2 Subject to paragraph 1.3, the formula for calculating the Services Fee for each Relevant Month (*rm*) during the Term is as follows:

Services
$$Fee_{rm} = PSF_{rm} + VSF_{rm} + AVSF_{rm} + SESF_{rm} + VAP_{rm} + ATF_{rm} + LSF_{rm} - PD_{rm-1} - RFD_{rm} + CSP_{rm} + PP_{rm} + FIMA - FIMD$$

Where:

- 1.2.1 *PSF*_{rm} is the Passenger Services Fee in respect of the Relevant Month, calculated in accordance with paragraph 2 (*Calculation of the Passenger Services Fee*);
- 1.2.2 VSF_{rm} is the Vehicle Services Fee payable in respect of the Relevant Month calculated in accordance with paragraph 3 (*Calculation of the Vehicle Services Fee*);
- 1.2.3 $AVSF_{rm}$ is the Additional Vehicle Services Fee (if any) payable in respect of the Relevant Month calculated in accordance with paragraph 4 (*Calculation of the Additional Services Fee*);

- 1.2.4 SESF_{rm} is the Special Event Services Fee (if any) in respect of the Relevant Month, calculated in accordance with paragraph 5 (Calculation of Special Event Services Fee);
- 1.2.5 *VAP_{rm}* is the Vehicle Availability Payment in respect of the Relevant Month, calculated in accordance with paragraph 11 (*Calculation of Vehicle Availability Payment*);
- 1.2.6 ATF_{rm} is the Alternative Transport Fee in respect of the Relevant Month, calculated in accordance with paragraph 12 (Calculation of Alternative Transport Fee);
- 1.2.7 *LSF*_{rm} is the Locomotive Services Fee in respect of the Relevant Month, calculated in accordance with paragraph 13 (*Calculation of Locomotive Services Fee*);
- 1.2.8 *PD_{rm-1}* is the aggregate of all Performance Deductions incurred in respect of Scheduled Services during the Relevant Month immediately preceding the Relevant Month, calculated in accordance with paragraph 6 (*Calculation of Performance Deductions*);
- 1.2.9 *RFD_{rm}* is the aggregate of any Reporting Failure Deductions to be deducted from the relevant payment in accordance with paragraph 7.4 (*Calculation of Reporting Failure Deductions*);
- 1.2.10 CSP_{rm} is the Customer Satisfaction Payment which:
 - (a) in respect of each Relevant Month falling after the month in which the Surveying Organisation provides the results of a Customer Satisfaction Survey (excluding the Base Customer Satisfaction Surveys) pursuant to Annexure 9 (Customer Satisfaction Survey) is the amount (if any) payable in accordance with paragraph 8.2 (Customer Satisfaction Payments) in respect of that Customer Satisfaction Survey; and
 - (b) otherwise, is zero;
- 1.2.11 PP_{rm} is the Performance Payment which:
 - (a) in relation to the last Relevant Month falling in any Half Year, is the aggregate amount (if any) to which the Operator is entitled under paragraph 9.5 (Operator's entitlement to payment); and
 - (b) in relation to all other Relevant Months, is zero.
- 1.2.12 *FIMA* is the FIM Adjustment in respect of any FIM Calculation Year in respect of which there is a Patronage Excess which:
 - (a) in relation to the Relevant Month falling after the Relevant
 Month in which notice is served under paragraph 10.2 (*Notice of Actual Patronage*) where there has been a Patronage Excess in the relevant FIM Calculation Year, is the amount of any FIM

Adjustment to which the Operator is entitled under paragraph 10.5 (*Payment*); and

- (b) in relation to all other Relevant Months, is zero; and
- 1.2.13 *FIMD* is the FIM Adjustment in respect of any FIM Calculation Year in respect of which there is a Patronage Shortfall which:
 - (a) in relation to the Relevant Month falling after the Relevant Month in which notice is served under paragraph 10.2 (*Notice of Actual Patronage*) where there has been a Patronage Shortfall in the relevant FIM Calculation Year, is the amount of any FIM Adjustment to be set off from the Services Fee under paragraph 10.6.2 (*Payment*); and
 - (b) in relation to all other Relevant Months, is zero.
- 1.3 GWRC and the Operator shall meet within 10 Business Days following the last day of the Term to discuss the Performance Deductions incurred in respect of Scheduled Services during the last Relevant Month of the Term as calculated in accordance with paragraph 6 (Calculation of Performance Deductions) (Final Month Performance Deductions). GWRC and the Operator shall use all reasonable endeavours to agree the Final Month Performance Deductions within 20 Business Days following the last day of the Term, to enable invoicing for the following month. If agreement is not reached regarding the amount of the Final Month Performance Deductions, GWRC shall be entitled to withhold from the payment of the Services Fee in respect of the last Relevant Month in the Term an additional amount equal to PD_{rm-1}. The amount witheld under this paragraph 1.3 shall remain in withholding status until a final agreement is reached between the parties, but once agreement is reached:
 - 1.3.1 where the amount withheld under this paragraph 1.3 exceeds the agreed Final Month Performance Deductions, GWRC shall pay the Operator the amount of such excess; and
 - 1.3.2 where the amount withheld under this paragraph 1.3 is less than the agreed Final Month Performance Deductions, the Operator shall pay GWRC the difference between the Final Month Performance Deductions and the amount withheld.

2 Calculation of the Passenger Services Fee

2.1 The Passenger Services Fee in respect of a Relevant Month (*PSF_{rm}*) (excluding the Relevant Month in which the Snapper Implementation Fee Change Date or the RS1 Project Phase Three Commencement Date occurs) shall be calculated as follows:

$$PSF_{rm} = PSF_a \quad x \quad \underline{PR}_a$$

Where:

- 2.1.1 *PSF_a* is (subject to Schedule 16 (*Change Events and Net Financial Impact*)) the amount specified in respect of the Period in which the Relevant Month falls, as set out in the relevant column of the Services Fees Table determined in accordance with paragraph 2.2 below; and
- 2.1.2 $PR_a = 1$ unless the Relevant Month is less than a full calendar month in which case $PR_a = \frac{NDRM_a}{NDRP}$

Where:

- 2.1.3 NDRM_a is the number of days in the Relevant Month; and
- 2.1.4 *NDRP* is the number of days in that calendar month.
- 2.2 For the purposes of paragraph 2.1, the relevant columns of the Services Fees Table shall be:
 - 2.2.1 at any time up to (but excluding) the occurrence of either the Snapper Implementation Fee Change Date or the RS1 Project Phase Three Commencement Date, the column of the Services Fees Table headed "Initial Passenger Services Fee";
 - 2.2.2 if the Snapper Implementation Fee Change Date occurs prior to the RS1 Project Phase Three Commencement Date, in the period from and including the Snapper Implementation Fee Change Date up to but excluding the RS1 Project Phase Three Commencement Date, the column of the Services Fees Table headed " "Passenger Services Fee IFT Snapper Ticketing ";
 - 2.2.3 if the RS1 Project Phase Three Commencement Date occurs prior to the Snapper Implementation Fee Change Date, in the period from and including the RS1 Project Phase Three Commencement Date up to but excluding the Snapper Implementation Fee Change Date, the column of the Services Fees Table headed "Passenger Services Fee RS1 Project Pre Priced Option"; and
 - 2.2.4 if both the RS1 Project Phase Three Commencement Date and the Snapper Implementation Fee Change Date have occurred, with effect from and including the last of the RS1 Project Phase Three Commencement Date and the Snapper Implementation Fee Change Date, the column of the Services Fees Table headed "Passenger Services Fee both IFT Snapper Ticketing and RS1 Project Pre Priced Option".
- 2.3 The Passenger Services Fee in respect of a Relevant Month (PSF_{rm}) in which the Snapper Implementation Fee Change Date or the RS1 Project Phase Three Commencement Date occurs shall be calculated as follows:

$$PSF_{rm} = (PSF_a \quad x \quad \underline{PR_a}) + (PSF_b \quad x \quad \underline{PR_b})$$
12

Where:

- 2.3.1 *PSF_a* is (subject to Schedule 16 (*Change Events and Net Financial Impact*)) the amount specified in respect of the Period in which the Relevant Month falls, as set out in the relevant column of the Services Fees Table determined in accordance with paragraph 2.2 above for the period prior to the Snapper Implementation Fee Change Date or the RS1 Project Phase Three Commencement Date (as the context requires); and
- $2.3.2 PR_a = \underbrace{NDRM_a}_{NDRP}$
- 2.3.3 PSF_b is (subject to Schedule 16 (*Change Events and Net Financial Impact*)) the amount specified in respect of the Period in which the Relevant Month falls, as set out in the relevant column of the Services Fees Table determined in accordance with paragraph 2.2 above for the period from and including the Snapper Implementation Fee Change Date or the RS1 Project Phase Three Commencement Date (as the context requires); and
- $2.3.4 PR_b = \underbrace{NDRM_b}_{NDRP}$

Where:

- 2.3.5 *NDRM_a* is the number of days in the Relevant Month before the Snapper Implementation Fee Change Date or the RS1 Project Phase Three Commencement Date (as the context requires);
- 2.3.6 *NDRM_b* is the number of days in the Relevant Month from and including the Snapper Implementation Fee Change Date or the RS1 Project Phase Three Commencement Date (as the context requires); and
- 2.3.7 *NDRP* is the number of days in that calendar month.

3 Calculation of the Vehicle Services Fee

3.1 The Vehicle Services Fee in respect of a Relevant Month (VSF_{rm}) (excluding the Relevant Month in which the RS1 Project Phase Three Commencement Date occurs) shall be calculated as follows:

$$VSF_{rm} = VSF_p \quad x \quad \underline{PR}$$

Where:

3.1.1 VSF_p is (subject to Schedule 16 (*Change Events and Net Financial Impact*)) the amount specified in respect of the Period in which the

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Relevant Month falls, as set out in the relevant column of the Services Fees Table determined in accordance with paragraph 3.2 below; and

3.1.2 PR = I unless the Relevant Month is less than a full calendar month in which case $PR = \underbrace{NDRM}_{NDRP}$

Where:

- 3.1.3 *NDRM* is the number of days in the Relevant Month; and
- 3.1.4 *NDRP* is the number of days in that calendar month.
- 3.2 For the purposes of paragraph 3.1, the relevant columns of the Services Fees Table shall be:
 - 3.2.1 at any time up to (but excluding) the occurrence of the RS1 Project Phase Three Commencement Date, the column of the Services Fees Table headed "Initial Vehicle Services Fee"; and
 - 3.2.2 if the RS1 Project Phase Three Commencement Date occurs, in the period from and including the RS1 Project Phase Three Commencement Date, the column of the Services Fees Table headed "Vehicle Services Fee RS1 Project Pre Priced Option".
- The Vehicle Services Fee in respect of a Relevant Month (VSF_{rm}) in which the RS1 Project Phase Three Commencement Date occurs shall be calculated as follows:

$$VSF_{rm} = (VSF_a \quad x \quad \underline{PR_a}) + (VSF_b \quad x \quad \underline{PR_b})$$
12

Where:

- 3.3.1 VSF_a is (subject to Schedule 16 (Change Events and Net Financial Impact)) the amount specified in respect of the Period in which the Relevant Month falls, as set out in the relevant column of the Services Fees Table determined in accordance with paragraph 3.2 above for the period prior to the RS1 Project Phase Three Commencement Date; and
- 3.3.2 $PR_a = \underbrace{NDRM_a}_{NDRP}$
- 3.3.3 *VSF_b* is (subject to Schedule 16 (*Change Events and Net Financial Impact*)) the amount specified in respect of the Period in which the Relevant Month falls, as set out in the relevant column of the Services Fees Table determined in accordance with paragraph 3.2 above for the period from and including the RS1 Project Phase Three Commencement Date; and
- 3.3.4 $PR_b = \underbrace{NDRM_b}_{NDRP}$

Where:

- 3.3.5 *NDRM_a* is the number of days in the Relevant Month before the RS1 Project Phase Three Commencement Date;
- 3.3.6 *NDRM_b* is the number of days in the Relevant Month from and including the RS1 Project Phase Three Commencement Date; and
- 3.3.7 *NDRP* is the number of days in that calendar month.

4 Calculation of the Additional Vehicle Services Fee

- 4.1 The Additional Vehicle Services Fee in respect of a Relevant Month ($AVSF_{rm}$) is the aggregate of the amounts (if any) payable in respect of the Relevant Month pursuant to:
 - 4.1.1 paragraph 13.6 (Exceptional Repair Work) of Schedule 4 (Vehicle Services);
 - 4.1.2 paragraph 14.7 (Payment in respect of Heavy Maintenance Services) of Schedule 4 (Vehicle Services); and
 - 4.1.3 paragraph 15.4 (GWRC funded Additional Modification Services) of Schedule 4 (Vehicle Services).

5 Calculation of Special Event Services Fee

5.1 Where in a Relevant Month the Operator has provided Special Event Services in accordance with the requirements of paragraph 3.27 (Special Event Services) of Schedule 3 (Passenger Services), the Special Event Services Fee payable in respect of each such Special Event Service shall, subject to paragraph 3.42 (Special Event Services Fee - supporting documentation) of Schedule 3 (Passenger Services) be:

Where:

RKM is the aggregate number of additional Revenue Service Kilometres travelled by each Train in order to provide the Special Event Service(s);

Rate is the applicable rate per Revenue Service Kilometre in the table set out in Appendix 2 (Special Event Services Rates) of Schedule 6 (Financial and Performance Regime); and

Security Cost is, to the extent additional security services are approved by GWRC for the Special Event Service under Schedule 3 (Passenger Services) or as part of the Annual Business Plan, the number of person hours for which security personnel are deployed for the Special Event Service multiplied by the rate per hour set out in the table set out in Appendix 2 (Special Event Services Rates) of Schedule 6 (Financial and Performance Regime).

6 Calculation of Performance Deductions

Introduction and definitions

- The Performance Deductions in respect of a Relevant Month (PD_{rm}) shall be calculated in accordance with this paragraph 6.
- 6.2 In this Partnering Contract, the following definitions apply unless the context otherwise requires:

Destination	means, in respect of a Scheduled Service, the Station at which that Scheduled Service is to terminate, as indicated in the Rail Unit Timetable.		
Intermediate Station	means:		
	(a) in respect of services on the Wairarapa Line, Featherston, Upper Hutt and Waterloo;		
	(b) in respect of services on the Hutt Valley Line, Waterloo; and		
	(c) in respect of services on the Kapiti Line, Porirua.		
Off Peak Service	means a Scheduled Service that is not a Peak Service.		
Origin	means, in respect of a Scheduled Service, the first Station from which that Scheduled Service is to depart, as indicated in the Rail Unit Timetable.		
Peak Service	means a Scheduled Service which:		
	(a) in the case of a Train travelling towards Wellington Station, is scheduled in the Rail Unit Timetable to arrive at its Destination between 06:30 and 09:30 on a Business Day; and		
	(b) in the case of a Train travelling away from Wellington Station, is scheduled in the Rail Unit Timetable to depart Wellington Station between 15:30 and 18:30 on a Business Day.		

Reliability KPI

- 6.3 The Operator shall ensure that:
 - 6.3.1 each Scheduled Service shall:

- (a) depart from its Origin and each Intermediate Station and do so no earlier than 30 seconds before the scheduled time for such departure set out in the Rail Unit Timetable;
- (b) meet the consist size for that Scheduled Service contemplated by the Working Timetable; and
- (c) stop at all Stations at which such Scheduled Service is scheduled to stop, as indicated in the Rail Unit Timetable; or
- 6.3.2 if a Scheduled Service is replaced by alternative transport arrangements, ensure that such alternative transport:
 - (a) departs from the Origin of the replaced Scheduled Service no later than 30 minutes after the scheduled time for the departure of the replaced Scheduled Service set out in the Rail Unit Timetable:
 - (b) provides sufficient capacity to carry all passengers who might reasonably be expected to desire to use such alternative transport in place of the replaced Scheduled Service;
 - (c) stop as close as is lawful, safe and reasonably practicable to all Stations at which such Scheduled Service is scheduled to stop, as indicated in the Rail Unit Timetable; and
 - (d) complies with the requirements of Schedule 3 (*Passenger Services*) and that the Operator complies with its obligations under Schedule 3 (*Passenger Services*) in respect of the relevant Planned Disruption or Unplanned Disruption.
- The extent to which a Scheduled Service complies with the requirements of the Reliability KPI will be measured by the utilisation of the on-board data system installed on the relevant Vehicles (being the Matangi Telemetry System in respect of those Vehicles comprising the Matangi Fleet and the RTPI System in respect of those Vehicles comprising the Carriage Fleet) or any other on or off-board replacement system nominated from time to time by GWRC or, in the case of alternative transport arrangements, any other available information source, provided that, if the relevant data system does not record the required data in respect of a Scheduled Service as a result of a breach by the Operator of this Partnering Contract or any other act or omission of the Operator or any Operator Associate, then such Scheduled Service shall be deemed not to have met the Reliability KPI.
- 6.5 Subject to paragraph 6.6 and paragraph 14 (*Excusing Events and Deemed Performance*), unless a Scheduled Service complies with all of the applicable requirements of the Reliability KPI, a Performance Deduction will be incurred in respect of that Scheduled Service, calculated in accordance with the table below:

Line on which relevant Scheduled Service operates	Performance Deduction amount in respect of Peak Service	Performance Deduction amount in respect of Off Peak Service
Johnsonville line		
Kapiti line		
Melling line		
Hutt Valley line		
Wairarapa line		

- 6.6 In the event that a Scheduled Service has met all of the requirements of the Reliability KPI other than the requirement relating to consist size set out in paragraph 6.3.1(b), then the Performance Deduction incurred in respect of the Reliability KPI in relation to that Scheduled Service shall be pro-rated down to reflect the extent to which the Scheduled Service did meet such requirements. Such reduction in such Performance Deduction shall be consistent with the examples given below:
 - 6.6.1 if compliance with paragraph 6.3.1(b) would have required the Scheduled Service to be operated using three EMUs, but that Scheduled Service was in fact operated using a two EMUs (such that the Scheduled Service was two thirds compliant with the requirement) the Performance Deduction shall be one third of the relevant amount set out in the table at paragraph 6.5; and
 - 6.6.2 if compliance with paragraph 6.3.1(b) would have required the Scheduled Service to be operated using two Carriages, but that Scheduled Service was in fact operated using one Carriage (such that the Scheduled Service was half compliant with the requirement), the Performance Deduction shall be one half of the relevant amount set out in the table at paragraph 6.5.

Punctuality KPI

- 6.7 The Operator shall ensure that each Scheduled Service shall arrive at the Destination and each Intermediate Station for that Scheduled Service no later than 5 minutes after the time scheduled in the Rail Unit Timetable for such arrival.
- The extent to which a Scheduled Service complies with the requirements of the Punctuality KPI will be measured by the utilisation of the on-board data system installed on the relevant Vehicles (being the Matangi Telemetry System in respect of those Vehicles comprising the Matangi Fleet and the RTPI System in respect of those Vehicles comprising the Carriage Fleet) or any other on or off-board replacement system nominated from time to time by GWRC provided that, if the relevant data system does not record the required data in respect of a Scheduled

- Service as a result of a breach by the Operator of this Partnering Contract or any other act or omission of the Operator or any Operator Associate, then such Scheduled Service shall be deemed not to have met the Punctuality KPI.
- 6.9 Subject to paragraphs 6.10, 6.11 (Rules where a Scheduled Service fails to meet more than one requirement), 6.13A and 6.13B (Initial relief from Punctuality KPI) and 14 (Excusing Events and Deemed Performance), unless a Scheduled Service complies with all of the requirements of the Punctuality KPI, a Performance Deduction will be incurred in respect of that Scheduled Service, calculated in accordance with the table below:

Difference between scheduled time of arrival of Scheduled Service at Destination or Intermediate Station (as set out in the Rail Unit Timetable) and actual time of such arrival	Performance Deduction amount in respect of Peak Service	Performance Deduction amount in respect of Off Peak Service
≤5 minutes		
>5 minutes but ≤ 7 minutes		
> 7 minutes but ≤ 15 minutes		
> 15 minutes		

Where a Scheduled Service is replaced by the Operator with alternative transport arrangements, then provided the Operator complies with the requirements of Schedule 3 (*Passenger Services*) in respect of such alternative transport and the relevant Planned Disruption or Unplanned Disruption no Performance Deduction will be incurred in respect of any failure by that Scheduled Service to meet the Punctuality KPI.

Rules where a Scheduled Service fails to meet more than one requirement

- 6.11 Subject to paragraph 6.12, if a Scheduled Service fails to meet a requirement of the Reliability KPI and also fails to meet a requirement of the Punctuality KPI, a Performance Deduction in respect of that Scheduled Service shall be incurred under paragraph 6.5 (*Reliability KPI*) only.
- 6.12 If a Scheduled Service:
 - 6.12.1 meets all the requirements of the Reliability KPI except the requirement relating to consist size set out in paragraph 6.3.1(b); and
 - 6.12.2 fails to meet a requirement of the Punctuality KPI,

Performance Deductions in respect of that Scheduled Service shall be incurred under both paragraphs 6.6 (*Reliability KPI*) and 6.9 (*Punctuality KPI*).

6.13 If a Scheduled Service fails to meet the Punctuality KPI at more than one Intermediate Station or at its Destination and an Intermediate Station, the Performance Deduction under 6.9 (*Punctuality KPI*) shall be calculated by using the greatest of the differences between the scheduled time of arrival of that Scheduled Service at the relevant station and the actual time of arrival.

Initial relief from Punctuality KPI

6.13A In respect of each Relevant Month from (and including) the first Relevant Month until (and including) the twelfth Relevant Month, a Performance Deduction will not be incurred under paragraph 6.9 (*Punctuality KPI*) in respect of the first x Late Trains in that Relevant Month where:

Late Trains means all Scheduled Services operated during the Relevant Month that meet all the requirements of the Reliability KPI but fail to meet the requirements of the Punctuality KPI;

$$x = \frac{\text{Trains Run}}{10}$$

Trains Run means all Scheduled Services operated during the Relevant Month that meet all the requirements of the Reliability KPI.

6.13B In respect of each Relevant Month from (and including) the thirteenth Relevant Month until (and including) the twenty-fourth Relevant Month, a Performance Deduction will not be incurred under paragraph 6.9 (*Punctuality KPI*) in respect of the first *y* Late Trains in that Relevant Month where:

Late Trains means all Scheduled Services operated during the Relevant Month that meet all the requirements of the Reliability KPI but fail to meet the requirements of the Punctuality KPI;

$$y = \frac{\text{Trains Run}}{20}$$

Trains Run means all Scheduled Services operated during the Relevant Month that meet all the requirements of the Reliability KPI.

References to a failure to achieve the Reliability KPI or the Punctuality KPI

6.14 References in this Partnering Contract to a failure to achieve the Reliability KPI or the Punctuality KPI (or similar terminology) shall mean a failure by the Scheduled Service to comply with the applicable requirements set out in paragraph 6.3 or paragraph 6.7 (as applicable). For the avoidance of doubt, a failure to comply with a single requirement in either paragraph 6.3 or paragraph 6.7 (as applicable) will be treated as a failure to achieve the Reliability KPI or the Punctuality KPI respectively.

7 Calculation of Reporting Failure Deductions

- 7.1 Where a Reporting Error is identified by a Party, that Party shall notify the other Parties as soon as reasonably practicable.
- 7.2 Where a Reporting Error affects the value of the Services Fee, such Reporting Error shall be deemed to be a "Financial Reporting Error".
- 7.3 Where there has been a Financial Reporting Error, then the Operator and GWRC shall promptly seek to resolve the Financial Reporting Error and determine the correct value for the affected Services Fee payment. Within 10 Business Days following the determination of the correct value for the affected Services Fee payment:
 - 7.3.1 if the Financial Reporting Error has resulted in the Operator receiving an overpayment, the Operator shall pay to GWRC an amount equal to the amount by which the Operator has been overpaid; or
 - 7.3.2 if the Financial Reporting Error has resulted in the Operator suffering an underpayment, GWRC shall pay an amount to the Operator equal to the amount by which the Operator has been underpaid.
- 7.4 For each Financial Reporting Error that occurs and results in the Operator receiving an overpayment, GWRC shall be entitled to deduct the sum of from the next instalment of the Services Fee payable by GWRC.

8 Customer Satisfaction Payments

Customer Satisfaction Surveys

8.1 GWRC shall procure that Customer Satisfaction Surveys shall be carried out by a Surveying Organisation in accordance with Annexure 9 (*Customer Satisfaction Survey*).

Customer Satisfaction Payments

- 8.2 Subject to paragraph 8.3, if the results of any Customer Satisfaction Survey undertaken after the Base Customer Satisfaction Surveys as reported by the Surveying Organisation under paragraph 6.5 of Annexure 9 (*Customer Satisfaction Survey*) demonstrate that the average response (expressed as a percentage to two decimal points) to the questions contained in the Customer Satisfaction Survey:
 - 8.2.1 exceeds the then current Customer Satisfaction Threshold but not the average response (expressed as a percentage to two decimal points) to the questions contained in the preceding Customer Satisfaction Survey, the Operator shall be entitled to payment of the contained in the preceding Customer Satisfaction Survey.
 - 8.2.2 either:
 - (a) is more than 95%; or

(b) exceeds the then current Customer Satisfaction Threshold and the average response (expressed as a percentage to two decimal points) to the questions contained in the preceding Customer Satisfaction Survey:

the Operator shall be entitled to payment of

8.3 The maximum payment which the Operator shall be entitled to (and which GWRC shall be liable for) pursuant to paragraph 8.2 shall not exceed in any Year.

9 Calculation of Performance Payments

Definitions

9.1 In this Partnering Contract, the following definitions apply unless the context otherwise requires:

	1		
Half Year	means, in respect of each Performance Payment Period, each of the following periods:		
	(a)	the period commencing on the first day of the first Relevant Month in that Performance Payment Period and expiring on the last day of the sixth Relevant Month in that Performance Payment Period; or	
	(b)	each subsequent period of six Relevant Months in that Performance Payment Period,	
	provided	d that:	
	(i)	in respect of the first Performance Payment Period, the first Half Year shall commence on the Commencement Date and shall expire on 31 December 2016; and	
	(ii)	in respect of the last Performance Payment Period, the last Half Year shall end on the Termination Date.	
Maximum Half Year	means multiplied by PR		
Performance Payment Amount	where:		
Amount	$PR = 1$ except that in respect of the first Half Year and the last Half Year $PR = \frac{NDRHY}{NDHY}$		
	where:		
	NDRHY = the number of days in the relevant Half Year; and		
	i	(a) in the case of the first Half Year, the of days from 1 July to the end of that Half	

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	Year and (b) in the case of the last Half Year, the number of days from the day after the end of the previous Half Year to the date falling six calendar months later.	
Nominated	means:	
Performance Indicator	(a)	in respect of the first Performance Payment Period, those Performance Indicators specified in paragraph 9.4; and
	(b)	in respect of each other Performance Payment Period, the relevant Performance Indicators notified by GWRC to the Operator pursuant to paragraph 9.2.
Nominated Performance Payment	means ir Indicato	respect of each Nominated Performance
Amount	(a)	during the first Performance Payment Period, the relevant amount specified for that Nominated Performance Indicator in paragraph 9.4; and
	(b)	during each other Performance Payment Period, the relevant amount notified by GWRC to the Operator pursuant to paragraph 9.2.2 as being the maximum Performance Payment payable in connection with that Nominated Performance Indicator.
Performance Payment	means each of the following:	
Period	(a)	the period commencing on and including the Commencement Date until and including 30 June 2017; and
	(b)	each subsequent period of 12 months,
	, -	that the last Performance Payment Period on (and including) the Termination Date.

Nominated Performance Indicators and Nominated Performance Payment Amount

- 9.2 Prior to the start of each Performance Payment Period, GWRC shall notify the Operator in writing of:
 - 9.2.1 up to three Performance Indicators (chosen at the sole discretion of GWRC) which will be the Nominated Performance Indicators for that Performance Payment Period; and
 - 9.2.2 subject to paragraph 9.3, the amount that will be payable by GWRC in accordance with paragraph 9.5 in respect of a Nominated Performance

Indicator for each Half Year falling within the relevant Performance Payment Period provided that the conditions in paragraph 9.5 are met.

- 9.3 The aggregate amount of the Performance Payments available to the Operator in respect of any Half Year shall be the Maximum Half Year Performance Payment Amount. For the avoidance of doubt, the aggregate amount of the Performance Payments payable by GWRC to the Operator in respect of any Half Year shall not exceed the Maximum Half Year Performance Payment Amount.
- 9.4 Subject to paragraph 9.3, the Nominated Performance Indicators and Nominated Performance Payment Amounts in respect of the first Performance Payment Period are as follows:
 - 9.4.1 Performance Indictor #10 (Passenger Load Factor Peak a.m. Service (set out in Schedule 3 (Passenger Services)) with a Nominated Performance Payment Amount of the service (set out in Schedule 3 (Passenger Services))
 - 9.4.2 Performance Indicator #6 (Number of Planned Maintenance and Heavy Maintenance Checks Undertaken) (set out in Schedule 4 (Vehicle Services)) with a Nominated Performance Payment Amount of and
 - 9.4.3 Performance Indicator #9 (Critical Business and Supplementary Systems) (set out in Schedule 4 (Vehicle Services)) with a Nominated Performance Payment Amount of Payment.

Operator's entitlement to payment

9.5 Subject to paragraph 9.3 and paragraph 14 (Excusing Events and Deemed Performance), if in each Relevant Month falling within a Half Year the Operator has achieved the PI Achieve Benchmark in respect of a Nominated Performance Indicator, the Operator shall be entitled to payment of the Nominated Performance Payment Amount for that Half Year applicable to that Nominated Performance Indicator.

10 Calculation of the FIM Adjustment

Definitions

10.1 In this paragraph 10, the following definitions apply unless the context otherwise requires:

Actual Patronage	means:	
	(a)	in respect of any period falling prior to each ETS Implementation Date, the total number of assumed passenger trips calculated, for each ticket type in the first column of the Assumed Trips Table, by taking the number of tickets of that type sold in that period and multiplying it by the number of trips

		-	et specified in the second column of e for that ticket type; and
	(b)		ct of any period on or after each plementation Date, the aggregate
		(i)	the total number of assumed passenger trips calculated in respect of all single trip paper tickets sold in that period in accordance with paragraph (a) above to the extent not taken into account under paragraph (ii) below; and
		(ii)	the total number of Valid Trips taken during that period.
Adjusted Actual	means:		
Patronage	(a)		M Calculation Years prior to the which the ETS Implementation Date
		AAP(n)	$=AP(n) \ x \ AdjFactor$
	(b)		M Calculation Year in which the plementation occurs
		AAP(n) AP _{AfterE1}	$= [AP_{BeforeETS} x \ AdjFactor] +$
	where;		
	}	Adjusted A culation	Actual Patronage in respect of a Year;
		$or = [AP_1 \\ 4)] \land (1/3)$	2MthsAfter/ AP 12Mths Before $J/[AP(n-i)]$;
	AP = Actual Patronage in respect of a FIM Calculation Year;		
	n = a FIM Calculation Year;		
	AP _{12MthsAfter} = Actual Patronage in respect of the 12 month period immediately after and including the ETS Implementation Date;		
	month p		ctual Patronage in respect of the 12 mediately preceding the ETS Date;
	FIM Cal		nal Patronage in the fraction of the Year prior to the ETS Date; and

	AP _{AfterETS} = Actual Patronage in the fraction of the FIM Calculation Year after and including the ETS Implementation Date.		
Assumed Trips Table	means the table set out in Appendix 4 to this Schedule 6, as updated from time to time by GWRC pursuant to paragraph 10.3 (<i>Changes to ticket types</i>) of this Schedule 6.		
ETS Patronage Measurement Adjustment	means that the ETS Implementation Date has occurred and in the 12 month period following the ETS Implementation Date, Actual Patronage is more than 103% or less than 97% of the Actual Patronage recorded in the prior 12 months.		
FIM Adjustment	means:		
	(a)	in respect of any FIM Calculation Year where there is a Patronage Excess, the product of the following calculation:	
		FIM Adjustment = Patronage Excess x Shadow Fare; and	
	(b)	in respect of any FIM Calculation Year where there is a Patronage Shortfall, the product of the following calculation:	
		FIM Adjustment = Patronage Shortfall x Shadow Fare.	
FIM Cap	means:		
	(a)	in respect of the FIM Calculation Year in which the Commencement Date occurs, multiplied by: \underline{d} 365	
		where <i>d</i> equals the number of days from and including the Commencement Date until and including the last day of that FIM Calculation Year;	
	(b)	in respect of the FIM Calculation Year in which the Termination Date occurs, multiplied by: \underline{d} 365	
		where <i>d</i> equals the number of days from and including the first day of that FIM Calculation Year until and including the Termination Date; and	

	(c)	in respect of each other FIM Calculation Year,
FIM Collar	means:	
	(a)	in respect of the FIM Calculation Year in which the Commencement Date occurs, multiplied by: \underline{d} 365
		where <i>d</i> equals the number of days from and including the Commencement Date until and including the last day of that FIM Calculation Year;
	(b)	in respect of the FIM Calculation Year in which the Termination Date occurs, multiplied by: \underline{d} 365
		where <i>d</i> equals the number of days from and including the first day of that FIM Calculation Year until and including the Termination Date; and
	(c)	in respect of each other FIM Calculation Year,
FIM Calculation Year	means:	
	(a)	the one year period ending on 30 June 2016 and each prior one year period; and
	(b)	each period of one year commencing on (and including) 1 July 2016 or any anniversary thereof.
FIM Objectives	means th	ne provision of a mechanism which:
	(a)	incentivises GWRC and the Operator to collaborate to grow patronage on and fare revenue from the Wellington Rail Network;
	(b)	takes account of the characteristics particular to the Services and the Wellington Rail Network;
	(c)	is simple to apply and administer; and
	(d)	contributes to value for money.

Patronage Projection	means, subject to paragraph 10.4 (ETS Patronage Measurement Adjustment) of this Schedule 6 (Financial and Performance Regime):		
	(a) for the FIM Calculation Year in which the Commencement Date falls or the FIM Calculation Year after the ETS Implementation Date falls:		
	$PP(n) = AP(n-1) \times [AP(n-1)/AP(n-4)] ^(1/3)$		
	(b) for each other FIM Calculation Year, the number calculated in accordance with the formula below:		
	$PP(n) = PP(n-1) \times [AP(n-1)/AP(n-4)] ^(1/3)$		
	where:		
	PP = the Patronage Projection;		
	n = a FIM Calculation Year; and		
	AP = the Actual Patronage in respect of a FIM Calculation Year, provided that if the ETS Patronage Measurement Adjustment occurs this shall be adjusted in accordance with paragraph 10.4.		
Patronage Shortfall	means, in respect of any FIM Calculation Year, the amount (if any) by which the Actual Patronage falls below the Patronage Projection.		
Shadow Fare	means, subject to paragraph 10.9 (Operator Initiatives),		
Valid Trip	means each trip made by a passenger (excluding Operator and Operator Associate staff travel) on the Wellington Rail Network using the IFT System as evidenced by that passenger having tagged on at a Station.		

Notice of Actual Patronage

10.2 Within 60 days following the last day of each FIM Calculation Year where part of that FIM Calculation Year falls within the Term, GWRC shall serve on the Operator a notice (certified by GWRC's Authorised Representative as being true, accurate and complete to the best of his or her knowledge) containing details for that FIM Calculation Year of the Actual Patronage and a calculation of the Patronage Shortfall or Patronage Excess.

Changes to ticket types

- 10.3 If GWRC:
 - 10.3.1 makes any change to any of the ticket types specified in the first column of the Assumed Trips Table such that the number of trips which a

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- passenger holding such a ticket is permitted to make with that ticket increases or decreases; or
- 10.3.2 GWRC introduces a new ticket type not specified in the Assumed Trips
 Table and not part of the IFT System,

then GWRC shall (acting reasonably) issue to the Operator an updated table specifying the number of trips it reasonably estimates to be applicable for the new or amended ticket type. That updated table will become the Assumed Trips Table for the purposes of this Partnering Contract from the date of its provision to the Operator in accordance with this paragraph 10.3.

ETS Patronage Measurement Adjustment

- 10.4 If the ETS Patronage Measurement Adjustment occurs, then with effect from the FIM Calculation Year after the FIM Calculation Year in which the ETS Implementation Date occurs:
 - 10.4.1 GWRC shall notify the Operator of the Adjusted Actual Patronage; and
 - 10.4.2 for the purposes of calculating the Patronage Projection, the Actual Patronage for all periods prior to and including the FIM Calculation Year in which the ETS Implementation Date occurs shall be deemed to be the Adjusted Actual Patronage.

Payment

- 10.5 If in any FIM Calculation Year where part of that FIM Calculation Year falls within the Term, there is a Patronage Excess, then the Operator shall be entitled to an amount equal to the FIM Adjustment provided that the amount payable by GWRC under this paragraph 10.5 in respect of any single FIM Calculation Year shall not exceed the FIM Cap.
- 10.6 If in any FIM Calculation Year where part of that FIM Calculation Year falls within the Term, there is a Patronage Shortfall, then, at GWRC's option, either:
 - 10.6.1 the Operator shall pay to GWRC within 90 days of the end of such FIM Calculation Year; or
 - 10.6.2 GWRC shall set off from the next payment of the Service Fee falling due following the date of service of the notice pursuant to paragraph 10.2,

an amount equal to the FIM Adjustment provided that the amount to be paid by the Operator or set off by GWRC under this paragraph 10.6 in respect of any single FIM Calculation Year shall not exceed the FIM Collar.

Operator Initiatives

10.7 GWRC and the Operator agree to work together collaboratively with a view to achieving the FIM Objectives. The Operator may at any time during the Term propose to GWRC by notice in writing:

- 10.7.1 an initiative to be implemented by it with the objective of increasing Actual Patronage; and
- 10.7.2 a temporary increase in the Shadow Fare to encourage the Operator in and reward it for the successful implementation of such initiative.
- 10.8 If GWRC (in its sole discretion despite anything to the contrary in this Partnering Contract) indicates that it is open to considering such initiative, the Operator shall document the proposal in detail in the next draft of the plans and financial forecasts to be submitted by it under the relevant provisions of paragraph 2 (*Annual Business Plan*) of Schedule 5 (*Planning, Reporting and Meetings*).
- 10.9 If GWRC (in its sole discretion despite anything to the contrary in this Partnering Contract) expressly approves such initiative and temporary increase in the Shadow Fare in its notice of approval under paragraph 2.16 (GWRC to approve) of Schedule 5 (Planning, Reporting and Meetings), the Operator shall diligently implement such initiative and the Shadow Fare shall be increased by the amount and for the period specified in GWRC's notice.

Review Meeting

- 10.10 If at any time, either GWRC or the Operator considers that the operation of the mechanism in this paragraph 10 is not achieving the FIM Objectives, it may serve notice on the other requiring a meeting to review the operation of this paragraph 10 against the FIM Objectives.
- 10.11 As soon as reasonably practicable following service of a notice under paragraph 10.10, GWRC and the Operator shall meet and seek to agree such changes to this paragraph 10 as are reasonably necessary to align it more closely with the FIM Objectives. If GWRC and the Operator reach such agreement, the parties shall as soon as reasonably practicable document such changes by way of a deed of variation and such changes shall come into effect in accordance with that deed of variation if and when that deed of variation comes fully and unconditionally into effect. If GWRC and the Operator do not reach such agreement, then the matter may not be referred to the Dispute Resolution Procedure and this paragraph 10 will continue in effect without amendment.

11 Calculation of Vehicle Availability Payment

11.1 The Vehicle Availability Payment in respect of each Relevant Month (AP_{rm}) shall be calculated as follows:

$$VAP_{rm} =$$

12 Calculation of Alternative Transport Fee

12.1 Where in a Relevant Month:

- 12.1.1 the Operator has provided or procured alternative transport arrangements to replace a Scheduled Service or Special Event Service disrupted by an Unplanned Disruption;
- 12.1.2 the Operator has complied with its obligations under paragraphs 3.10, 3.12 to 3.17 (inclusive) and 3.21 to 3.24 (inclusive) of Schedule 3 (*Passenger Services*) in respect of such Unplanned Disruption and alternative transport; and
- 12.1.3 the relevant Unplanned Disruption was not attributable to the fault of any of the Operator or any Operator Associate;

the Operator shall, subject to paragraphs 3.15 and 3.16 (*Costs relating to alternative transport arrangements*) of Schedule 3 (*Passenger Services*), be entitled to the Alternative Transport Fee, being an amount equal to of its actual reasonable external costs of so providing or procuring such alternative transport.

13 Calculation of Locomotive Services Fee

13.1 The Locomotive Services Fee in respect of a Relevant Month (LSF_{rm}) shall be calculated as follows:

$$LSF_{rm} = MSFCLCSA_{rm} - SPTC_{rm}$$

Where:

- 13.1.1 *MSFCLCSA_{rm}* is the amount of the Monthly Services Fee (as defined in the CLCSA) payable by the Operator to KiwiRail under the CLCSA in respect of the Relevant Month; and
- 13.1.2 *SPTC_{rm}* is the amount of the Shunt Personnel Training Cost (as defined in the CLCSA) payable by the Operator to KiwiRail under the CLCSA in respect of the Relevant Month.

14 Excusing Events and Deemed Performance

Excusing Events

- 14.1 A Performance Deduction shall not be deducted from the Services Fee provided that:
 - 14.1.1 such Performance Deduction is directly attributable to an Excusing Event;
 - 14.1.2 the Operator has used all reasonable endeavours to mitigate the effect of the Excusing Event on the provision of the Services; and
 - 14.1.3 the Operator has otherwise complied with any express obligation imposed on the Operator under this Partnering Contract in respect of such Excusing Event (including in respect of alternative transport under Schedule 3 (*Passenger Services*)).

- 14.2 A failure by the Operator to achieve a PI Achieve Benchmark shall be disregarded for the purposes of calculating the relevant Performance Payment in respect of a Nominated Performance Indicator, or for Performance Indicators which are not Nominated Performance Indicators, for the purposes of determining the Operator's performance against that Performance Indicator, provided that:
 - 14.2.1 such failure is directly attributable to an Excusing Event;
 - 14.2.2 the Operator has used all reasonable endeavours to mitigate the effect of the Excusing Event on the provision of the Services; and
 - 14.2.3 the Operator has otherwise complied with any express obligation imposed on the Operator under this Partnering Contract in respect of such Excusing Event (including in respect of alternative transport under Schedule 3 (*Passenger Services*)).

Operator's responsibility

- 14.3 It shall be the responsibility of the Operator to demonstrate that an Excusing Event has occurred and that it is entitled to relief under paragraph 14.1 or 14.2 (as applicable).
- The Operator shall promptly provide any information reasonably required by GWRC in connection with an Excusing Event and its effects (including any information reasonably required to demonstrate that the conditions in paragraph 14.1.1 to paragraph 14.1.3 or paragraph 14.2.1 to paragraph 14.2.3 (as applicable) have been met).

Additional rolling stock

- 14.5 A failure by the Operator to achieve a PI Achieve Benchmark shall be disregarded for the purposes of calculating the relevant Performance Payment in respect of a Nominated Performance Indicator, or for Performance Indicators which are not Nominated Performance Indicators, for the purposes of determining the Operator's performance against that Performance Indicator, provided that:
 - 14.5.1 achieving such a PI Achieve Benchmark would require the Operator to acquire any rolling stock in addition to the Vehicles; and
 - 14.5.2 the requirement to acquire such additional rolling stock has not been caused or contributed to by any failure by the Operator to operate and maintain the Vehicles in accordance with this Partnering Contract.
- It shall be the responsibility of the Operator to demonstrate that it is entitled to relief under paragraph 14.5.

Deemed Performance

- 14.7 To the extent only that:
 - 14.7.1 any GWRC System or any data held or generated by a GWRC System is required in order to measure the extent to which the Operator has met the

- requirements of the Reliability KPI or the Punctuality KPI for the purposes of calculating a Performance Deduction;
- 14.7.2 such GWRC System or data is, at the relevant time, unavailable or materially inaccurate (except to the extent caused or contributed to by any act or omission of the Operator or any Operator Associate); and
- 14.7.3 as a result of the circumstances referred to in paragraph 14.7.2, it is not possible to accurately measure the extent to which the Operator has met the requirements of the Reliability KPI or the Punctuality KPI,

then, for the purposes of calculating the relevant Performance Deduction and the extent to which the Operator has complied with its obligations under this Partnering Contract in respect of the Reliability KPI or the Punctuality KPI (as applicable), the Operator shall be deemed to have met the requirements of Reliability KPI or the Punctuality KPI (as applicable).

Appendix 1 - Services Fees Table

Period ⁴	Initial Passenger Services Fee \$	Initial Vehicle Services Fee \$	Passenger Services Fee - IFT Snapper Ticketing \$	Passenger Services Fee - RS1 Project Pre Priced Option \$	Vehicle Services Fee -RS1 Project Pre Priced Option \$	Passenger Services Fee - both IFT Snapper Ticketing and RS1 Project Pre Priced Option \$	Vehicle Services Fee - both IFT Snapper Ticketing and RS1 Project Pre Priced Option \$
1 July 2016 to 30 June 2017 (2016/17)							
1 July 2017 to 30 June 2018 (2017/18)	7						
1 July 2018 to 30 June 2019 (2018/19)							
1 July 2019 to 30 June 2020 (2019/20)							
1 July 2020 to 30 June 2021 (2020/21)							
1 July 2021 to 30 June 2022 (2021/22)							
1 July 2022 to 30 June 2023 (2022/23)							
1 July 2023 to 30 June 2024 (2023/24)							
1 July 2024 to 30 June 2025 (2024/25)							
1 July 2025 to 30 June 2026 (2025/26)							
1 July 2026 to 30 June 2027 (2026/27)	1						
1 July 2027 to 30 June 2028 (2027/28)							
1 July 2028 to 30 June 2029 (2028/29)							
1 July 2029 to 30 June 2030 (2029/30)							
1 July 2030 to 30 June 2031 (2030/31)							
1 July 2031 to 30 June 2032 (2031/32)							

¹ The dollar amounts for each period are to be pro-rated in accordance with paragraphs 2.1 and 3.1.

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Appendix 2 - Special Event Services Rates

EMU Trains	Applicable Rate Per Revenue Service Kilometre
First EMU of a Train providing Special Event Services	
Second and each subsequent EMU comprising a Train providing Special Event Services	
Carriage Trains	Applicable Rate Per Revenue Service Kilometre
Locomotive and first Carriage of a Train providing Special Event Services	
Second and each subsequent Carriage of a Train providing Special Event Services	
Security Personnel	Applicable Rate per person hour
Security personnel deployed for the Special Event Service	on Public Holidays on all other days

Appendix 3 - Rail Unit Timetable Change Rates

EMU Trains	Applicable Rate Per Revenue Service Kilometre
First EMU of a Train providing passenger services differing from the Scheduled Services	Weekdays: Saturday: Sunday & Public Holidays:
Second and each subsequent EMU comprising a Train providing passenger services differing from the Scheduled Services	Weekdays: Saturday: Sunday & Public Holidays:
Carriage Trains	Applicable Rate Per Revenue Service Kilometre
Locomotive and first Carriage of a Train providing passenger services differing from the Scheduled Services	Weekdays: Saturday: Sunday & Public holidays:
Second and each subsequent Carriage of a Train providing passenger services differing from the Scheduled Services	Weekdays: Saturday: Sunday & Public Holidays:

Appendix 4 - Assumed Trips Table

Ticket Type	Trips per Ticket
3 Day Weekend Rover	4
Adult 10 Trip	10
Adult Single	1
Child 10 Trip	10
Child Monthly	38
Child Single	1
Day Rover	2
Gold Pass	1
Group Rover	5
Metlink Explorer	2
Monthly	38
Off Peak	1
Priv 10 Trip	10
Priv Monthly	38
Priv Return	2
School Term	100
Stadium Tickets	2
Staff Travel	0
Strip Tickets	1
Trentham Races	2
Wairarapa Day Ex	2

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Appendix 5 - Overall Heavy Maintenance Budget

Year	Initial Matangi C check budget \$	Initial SE Passenger Carriages D check budget \$	Initial SW Passenger Carriages D check budget \$	Total \$
1 July 2016 to 30 June 2017 (2016/17)				
1 July 2017 to 30 June 2018 (2017/18)				
1 July 2018 to 30 June 2019 (2018/19)				
1 July 2019 to 30 June 2020 (2019/20)				
1 July 2020 to 30 June 2021 (2020/21)				
1 July 2021 to 30 June 2022 (2021/22)				
1 July 2022 to 30 June 2023 (2022/23)				
1 July 2023 to 30 June 2024 (2023/24)				
1 July 2024 to 30 June 2025 (2024/25)				
1 July 2025 to 30 June 2026 (2025/26)				
1 July 2026 to 30 June 2027 (2026/27)				
1 July 2027 to 30 June 2028 (2027/28)				
1 July 2028 to 30 June 2029 (2028/29)				
1 July 2029 to 30 June 2030 (2029/30)				
July 2030 to 30 June 2031 (2030/31)				
I July 2031 to 30 June 2032 (2031/32)				

Under paragraph 14.17 (Operator's Rights and Responsibilities) of Schedule 4 (Vehicle Services), the Operator acknowledges and agrees that its costs related to RS1 are already included in the Annual Heavy Maintenance Budget and the Overall Heavy Maintenance Budget. The Operator shall not be entitled to amend the Annual Heavy Maintenance Budget, the Overall Heavy Maintenance Budget or the amounts specified in the Heavy Maintenance Rate Card as a consequence of RS1.

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Appendix 6 - Heavy Maintenance Rate Card

Fee per Matangi C Check

Check	Time	Distance	Fee
C1 Check	3 years	270,000km	
C2 Check	6 years	540,000km	
C3 Check	9 years	810,000km	
C4 Check	12 years	1,080,000km	
C5 Check	15 years	1,350,000km	
C6 Check	18 years	1,620,000km	

Fee Per SE Passenger Carriages D Check

Check	Frequency	Distance	Fee
D1 Check	3	300,000km to 400,000km	
D2 Check		600,000km to 800,000km	
D3 Check	25,000 hrs to 30,000 hrs		

Fee per SW Passenger Carriages D Check

Check	Frequency	Distance	Fee
D1 Check		300,000km to 400,000km	
D2 Check		600,000km to 800,000km	
D3 Check	25,000 hrs to 30,000 hrs		

Appendix 7 - Additional Vehicle Services Rate Card

Rates for Exceptional Repair Work

Requirement	Unit	Rate
Tradesman	Per Person Hour	
Professional Engineer	Per Person Hour	
Parts	Margin %	
Outsourcing	Margin %	

Rates for Additional Modification Services

Requirement	Unit	Rate
Tradesman	Per Person Hour	
Professional Engineer	Per Person Hour	
Parts	Margin %	
Outsourcing	Margin %	

Appendix 8 - NFI Event Rate Card

Rates for NFI Event

Requirement	Unit	Rate
Tradesman	Per Person Hour	
Professional Engineer	Per Person Hour	
All other reasonable direct incremental costs properly incurred (see paragraphs 13.1.2 and 13.1.3 of Schedule 16 (Change Events and Net Financial Impact))	Margin %	

Attachment Two - new Schedule 13 (IFT Programme)

1 Introduction

- 1.1 This Schedule sets out the scope of the Operator's role and obligations in regard to the IFT Programme for the purpose of:
 - 1.1.1 describing the expected phases of the IFT Programme;
 - 1.1.2 describing the Operator's role and obligations during each phase; and
 - 1.1.3 providing information to allow the Operator to price the cost of its Services during each phase.
- 1.2 The scope of the Operator's role and obligations in regard to the IFT Programme described in this Schedule is also relevant to the Operator's obligations set out at:
 - 1.2.1 Clauses 12.4 (IFT System Equipment), 15 (Training requirements), 31 (Audit and inspection rights), 48 (Farebox Revenue and other Revenue) and 70.5 (IFT System data protection) of this Partnering Contract;
 - 1.2.2 Schedule 3 (Passenger Services);
 - 1.2.3 Schedule 5 (*Planning, Reporting and Meetings*);
 - 1.2.4 Annexure 3 (Customer Communication and Information Systems); and
 - 1.2.5 Annexure 6 (*Fares, Ticketing and Enforcement Requirements*).

2 Background and indicative dates

- 2.1 The 2014 Regional Public Transport Plan identifies the introduction of a new fares and ticketing system across the Wellington Public Transport Network as a major initiative.
- 2.2 The IFT Programme comprises the following:
 - 2.2.1 fare structure review and simplification;
 - 2.2.2 planning, procurement and implementation of the Snapper System (as part of the IFT System) for use on all Scheduled Services and Special Event Services that will be:
 - (a) implemented on the Rail Unit; and
 - (b) form part of the Snapper System operating across the Wellington Public Transport Network; and
 - 2.2.3 planning, procurement, development, testing and implementation of the NTS (as part of the IFT System) for use on all Scheduled Services and Special Event Services that will be:
 - (a) implemented on all PTOM Units; and

- (b) integrated across the Wellington Public Transport Network.
- 2.3 GWRC is responsible for completing the fare structure review and simplification and for the planning, procurement and funding of the IFT System.
- 2.4 The Operator shall:
 - 2.4.1 co-operate with GWRC in relation to the implementation of the IFT Programme;
 - 2.4.2 provide reasonable support and assistance to GWRC; and
 - 2.4.3 comply with its obligations set out in this Schedule 13,

to ensure that the IFT Programme delivers GWRC's objectives set out at paragraph 2.5.

- 2.5 GWRC's objectives for the IFT Programme are:
 - 2.5.1 that customers using the Wellington Public Transport Network will:
 - (a) experience a modern, effective and efficient integrated public transport network that contributes to sustainable economic growth, increased productivity and provides for the social needs of the community;
 - (b) use integrated fares and ticketing across all PTOM Units;
 - (c) pay one fare and use consistent fare media (e.g. a smartcard) for a customer journey irrespective of whether the journey involves more than one PTOM Unit:
 - (d) use standardised but more flexible fare products;
 - (e) use simpler and more effective fares designed to make free transfer between PTOM Units easier without fare transfer penalties:
 - (f) experience a quicker boarding of some services; and
 - (g) experience improved operational efficiency;
 - 2.5.2 that in regard to the Rail Unit, GWRC and the Operator will experience:
 - (a) improved revenue collection;
 - (b) increased patronage; and
 - (c) improved data collection to assist the monitoring of revenue collection, patronage and the customer travel experience.
- 2.6 The revised indicative key dates that GWRC is working to in regard to the IFT Programme are set out in the table below. Each of these dates is indicative only and remains subject to change at the discretion of GWRC.

Phase	Task	Indicative dates for IFT Programme
IFT Phase One	Fare structure review process commences	From Commencement Date and ongoing
	Snapper System:	
	Snapper Pilot on Johnsonville Line	November 2021
	Expansion of Snapper to all Lines approved	April 2022
	Snapper goes live on Kapiti Line	12 November 2022
	Snapper goes live on the Melling Line, Hutt Valley Line and Wairarapa Line	27 November 2022
	Off-board paper ticket sales cease	December 2022
	Community Services Card concessions start	February 2023
And the later with	NTS System:	
	NTS Master Services Agreement signed	September 2022
	GWRC (NTS) Transitional Preliminary Design Review	February 2023
	GWRC (NTS) Transition Critical Design Review	January 2024
	GWRC (NTS) Field Test or Pilot Complete	November 2024
IFT Phase Two	GWRC (NTS) Go Live Full Roll out complete – Rail Unit	January 2025

3 IFT Programme phases

3.1 The Operator's role in regard to the IFT Programme will be separated into the following phases:

- 3.1.1 <u>IFT Phase One</u>: covering the period from the date of this Partnering Contract until the earlier of the NTS Implementation Date and the Termination Date; and
- 3.1.2 <u>IFT Phase Two</u>: covering the period from and including the NTS Implementation Date until the Termination Date.
- The indicative date for the end of IFT Phase One and commencement of IFT Phase Two is not yet known but it is unlikely to be prior to January 2025, although this remains subject to change at GWRC's discretion.
- 3.3 Prior to IFT Phase Two commencing, the parties will review the scope of the Operator's role during IFT Phase Two and GWRC may issue a GWRC initiated Minor Contract Variation Notice or Variation Proposal in accordance with section 5 or 6 of Schedule 16 (Change Events and Net Financial Impact).
- 3.4 For the avoidance of doubt it is agreed that:
 - 3.4.1 IFT Phase Two shall not commence and the NTS Implementation Date shall not be confirmed by GWRC until either:
 - (a) GWRC has issued a Variation Order following completion of the process at section 5 or 6 of Schedule 16 (*Change Events and Net Financial Impact*), or
 - (b) the Parties have agreed the terms and conditions of, and executed, a deed of variation setting out any agreed changes to the Operator's role and obligations during IFT Phase Two and recording the Parties agreement as to the Net Financial Impact (if any) as a consequence of the change, and
 - 3.4.2 in accordance with the document entitled "Deed of Variation: Snapper on Rail" made between the Parties, from the Effective Date (Deed of Variation: Snapper on Rail) all provisions in this Partnering Contract related to the IFT Programme Pre Priced Option (as defined in the Partnering Contract prior to the Effective Date (Deed of Variation: Snapper on Rail)) will no longer apply and are either deleted or amended to the effect that:
 - (a) the IFT Programme Implementation Fee (as defined in the Partnering Contract prior to the Effective Date (Deed of Variation: Snapper on Rail)) is no longer payable and will not be claimed;
 - (b) the provisions relevant to the IFT Programme Pre Priced Option (as defined in the Partnering Contract prior to the Effective Date (Deed of Variation: Snapper on Rail)) and associated adjustments to the Passenger Services Fee and the Vehicle Services Fee referred to in paragraph 4.5.2 of Schedule 16 (Change Events and Net Financial Impact) no longer apply, and

(c) paragraphs 2 and 3 of Schedule 6 (*Financial and Performance Regime*) and the Services Fees Table at Appendix One of Schedule 6 are amended with effect from the Snapper Implementation Fee Change Date.

4 Scope of Operator's role in regard to IFT Programme

- 4.1 The tables in the Appendices to this Schedule 13 set out the scope of the Operator's role broken down by the different activities required during each of the phases of the IFT Programme. The Operator shall comply with the requirements set out in the columns entitled "Scope of Operator's role" in:
 - 4.1.1 Appendix A (*IFT Phase One*) during IFT Phase One;
 - 4.1.2 Appendix B (*IFT Phase Two*), but only if, prior to the NTS Implementation Date, GWRC has issued an approved Variation Order or the Parties have agreed the terms and conditions of a deed of variation as described at paragraph 3.4.1 (b).
- 4.2 The Parties acknowledge and agree that:
 - 4.2.1 payments in respect of the activities and the scope of the Operator's role during IFT Phase One until the Snapper Implementation Fee Change Date shall form part of the Initial Passenger Services Fee and Initial Vehicle Services Fee and the Operator shall not be entitled to any additional payment in respect of the performance of such activities;
 - 4.2.2 the activities and scope of the Operator's role from the Snapper Implementation Fee Change Date result in changes to the activities and scope of the Operator's role during IFT Phase One and as a consequence the Parties have agreed an adjustment to the Passenger Services Fee with effect from the Snapper Implementation Fee Change Date (as set out at paragraph 2 of Schedule 6 (*Financial and Performance Regime*);
 - 4.2.3 prior to the NTS Implementation Date, the activities and scope of GWRC's and the Operator's respective roles during IFT Phase Two shall be reviewed and any agreed changes shall be set out in either a Variation Order or deed of variation completed in accordance with paragraph 3.4.1, such Variation Order or deed of variation to also record any associated Net Financial Impact, including, (if agreed) any adjustment to the Passenger Services Fee and Vehicle Services Fee and (if agreed) any IFT Phase Two Implementation Fee; and
 - 4.2.4 notwithstanding anything to the contrary in this Partnering Contract,
 GWRC is not obliged to implement the NTS or to proceed with IFT Phase
 Two and GWRC's decision not to proceed with IFT Phase Two or not to
 implement the NTS (or any other replacement):

- (a) shall be deemed not to be an act or omission by GWRC (including a breach of contract) under or in connection with this Partnering Contract; and
- (b) shall not entitle the Operator to make any Claim against GWRC.

Appendix A - IFT Phase One

The Parties acknowledge and agree that:

- (a) the scope of the Operator's role set out in this Appendix A up to (but excluding) the Snapper Implementation Fee Change Date, is included within the Initial Passenger Services Fee and the Initial Vehicle Services Fee; and
- (b) the scope of the Operator's role set out in this Appendix A from (and including) the Snapper Implementation Fee Change Date, is included within the Passenger Services Fee and the Vehicle Services Fee set out in relevant cloumns (as applicable) of the Services Fee Table

	IFT Phase One	
Nature of activity	Scope of Operator's role:	Scope of GWRC's role
IFT System planning	 Ensure that the Operator participates in all IFT System planning meetings from the date of this Partnering Contract (subject to reasonable prior notice of such meetings being given by GWRC); Ensure that the Operator and the 	 Plan the IFT Programme and coordinating input from all stakeholders, including the Operator; run workshops with the Operator to review and define operational and financial reports for use in
	relevant Operator Associates provide their views in regard to the specification for the IFT System applicable to the Rail Unit, the planned procurement of the IFT System and all matters relevant to IFT System planning and promptly conveys such views to GWRC;	planning, provision of services, revenue collection and other purposes; and 3. develop transition planning to be implemented for the IFT System.
	3. contribute to formulating transition arrangements for the IFT System;	
	4. ensure that the Operator promptly provides such information and advice as GWRC may reasonably require in connection with the IFT System, the procurement process relating to the IFT System and the terms of the contract that GWRC will enter into for the supply of the IFT System;	

	IFT Phase One
Nature of activity	Scope of Operator's role: Scope of GWRC's role
	5. provide details of any operational impacts expected to arise from the implementation of the IFT System;
	6. provide details of any systems or equipment of the Operator's which will be required to interface with the IFT System;
	7. share operational knowledge and data from the Operator's experience, if any, of working with other integrated and electronic ticketing systems;
	8. provide details of consequences on this Partnering Contract of each option considered as part of the IFT Programme, including but not limited to different methods of fare collection and enforcement;
·	9. develop in consultation with GWRC, and consistent with GWRC's transition planning in respect of the IFT Programme to cover all operational impacts of IFT System implementation; and
	10. take part in workshops with GWRC to review and define operational and financial reports for use in planning, provision of services, revenue collection and other purposes.
Procurement of IFT System	 assist with providing input on the iterative changes to the specification of the IFT System and the overall IFT Programme scope during the procurement process. award the contract(s) for the IFT System and enter into a contract with the IFT System Provider.
Design and build the IFT System	Ensure that the Operator provides any comments if requested by GWRC on each iterative design of

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	IFT Phase One
Nature of activity	Scope of Operator's role: Scope of GWRC's role
	the IFT System, including from the perspective of ensuring efficient functioning of the Rail Unit, ease of use and access for customers and ability to enforce ticket revenue collection; and
	provide input on any operational issues with the proposed physical location or functioning of the IFT System Equipment.
Install, commission and test the IFT System Equipment	1. Permit the IFT System Provider to access the Operator's premises to install, commission, test and monitor the IFT System Equipment and provide electricity and data connections for this purpose; Enter into a contract(s) with the IFT System Provider to install, commission and test the IFT System. System.
	2. promptly provide details of any faults with the IFT System during installation, commissioning and testing;
	3. integrate any equipment of the Operator and the Operator Associates with the IFT System only in accordance with clause 12.4.3 of this Partnering Contract;
	4. take part in any testing and commissioning of the ticketing and revenue protection functions of IFT System requested by GWRC; and
	5. ensure that the Operator is involved in and co-ordinates the required Operator contribution to the management of the contract that GWRC will enter into for the supply of the IFT System, including in regard to installation at Stations, testing and commissioning of all aspects of the IFT System and

	IFT Phase One	
Nature of activity	Scope of Operator's role:	Scope of GWRC's role
	assisting GWRC in the management of the support obligations of the IFT System.	
Operator staff training	Provide training and all relevant information to its employees responsible for selling, issuing and checking tickets to enable them to implement the provisions of this Schedule 13 (IFT Programme) and Annexure 6 (Fares, Ticketing and Enforcement Requirements) in accordance with clause 15 (Training Requirements) of this Partnering Contract.	Provide the Operator with relevant information to undertake staff training.
Fare structure	 Provide input into the annual fare review process; implement all iterative changes to the fare structure and sell only those fare products referred to in Annexure 6 (Fares, Ticketing and Enforcement Requirements); provide training and all relevant information to its employees responsible for selling, issuing and checking tickets to enable them to understand the fare structure and fare products, and any changes; support GWRC in the rationalisation of current rail tickets and fare products, including assisting in the planning and implementation of programmes for the phased withdrawal of fare products (which will be replaced by fare products defined under the IFT Programme); contribute to the finalisation of and implement the GWRC Fare Media Transition Plan; 	 Carry out an assessment of all fare structure and fare products available; decide and approve the changes required to the fare structure and fare products; provide all relevant information to the Operator required to enable the fare structure to be implemented, including any changes to Annexure 6 (Fares, Ticketing and Enforcement Requirements); develop and lead the GWRC Fare Media Transition Plan; and provide Operator with relevant information to undertake staff training where required.

	IFT Phase One	
Nature of activity	Scope of Operator's role:	Scope of GWRC's role
	 6. actively engage in communicating fares and fare product information to customers throughout the fare transition associated with the IFT Programme in accordance with the requirements of the GWRC Fare Media Transition Plan and Annexure 3 (Customer Communications and Information Systems); and 7. promptly provide to GWRC feedback received from customers on the fare structure and fare products. 	
Ticketing	 Sell tickets and collect Farebox Revenue on behalf of GWRC in accordance with clause 48 (Farebox Revenue and other Revenue) of this Partnering Contract and Annexure 6 (Fares, Ticketing and Enforcement Requirements); manage the procurement and stocks of current rail tickets in accordance with GWRC's requirements; provide and manage staff in Ticket Offices to undertake ticket sales and customer service; and contract with Ticket Agents for sale of tickets in accordance with clause 48.23. terminate Ticket Agent Agreements from the Snapper Implementation Date 	 Undertake the rationalisation of rail tickets and fare products towards the phased withdrawal of products; provide to the Operator any updates to Annexure 6 (Fares, Ticketing and Enforcement Requirements) relating to ticketing changes; operate the Metlink website which provides for ticketing and customer service; and operate the Metlink call centre which provides for ticketing and customer service.
Revenue collection and payment to GWRC	Comply with the Operator's obligations in clause 48 (<i>Farebox Revenue and other Revenue</i>) of this Partnering Contract;	

IFT Phase One		
Nature of activity	Scope of Operator's role:	Scope of GWRC's role
	2. provide farebox reports in accordance with Schedule 5 (Planning, Reporting and Meetings); and 3. support GWRC in the planning and implementation of the programme for the phased withdrawal of existing revenue collection activities (which will be replaced under the IFT Programme) and in the planning for revised revenue collection roles.	
Enforcement	 Comply with the Operator's revenue protection and enforcement obligations in paragraphs 3.58 to 3.60 and paragraph 3.63 of Schedule 3 (Passenger Services) and Annexure 6 (Fares, Ticketing and Enforcement Requirements); comply with the Revenue Protection and Customer Service Plan referred to in paragraph 1.3.12 of Appendix 1 of Schedule 5 (Planning, Reporting and Meetings); provide the Monthly Revenue 	1. Provide to the Operator any updates to Annexure 6 (Fares, Ticketing and Enforcement Requirements), including protection and enforcement updates resulting from changes to the legislative framework for protection and enforcement; and 2. approve the plan for staff transition to revised IFT Phase Two roles, at GWRC's discretion.
	Protection Report referred to in paragraph 3.1.8(e) of Schedule 5 (<i>Planning, Reporting and Meetings</i>); 4. support GWRC's input to seeking legislative changes to enable the enhancement of revenue protection and enforcement powers, and amend revenue protection and enforcement functions and plans to fully exploit enhanced powers as they become available; 5. provide feedback on the relative success and outcomes of each method of ticket revenue protection	

IFT Phase Onc		
Nature of activity	Scope of Operator's role:	Scope of GWRC's role
	and enforcement, including any suggested improvements to the system to allow greater collection of ticket revenue and efficiency of the service; 6. ensure that all revenue enforcement staff are adequately trained and wear proper uniforms in accordance with clauses 15 (Training requirements) and 16 (Branding, uniforms and livery) of this Partnering Contract; and	
	7. produce a plan for GWRC's approval for staff transition to revised revenue and protection enforcement roles and include these details in the Revenue Protection and Customer Service Plan in accordance with the procedure in Schedule 5 (Planning, Reporting and Meetings).	

Appendix B - IFT Phase Two

Nature of activity	Scope of Operator's role (indicative	Scope of GWRC's role (indicative
ratare or activity	only). NOTE: Scope to be reviewed and updated prior to the NTS Implementation Date and changes	only). NOTE: Scope to be reviewed and updated prior to the NTS Implementation Date and
	recorded in either an approved Variation Order or deed of variation completed in accordance with paragraph 3.4.1	changes recorded in either an approved Variation Order or deed of variation completed in accordance with paragraph 3.4.1
IFT Programme operations and planning	To be established via Variation Order or deed of variation prior to NTS Implementation Date	Operate the IFT Programme and IFT System.
Branding of the IFT System	To be established via Variation Order or deed of variation prior to NTS Implementation Date	Responsible for all aspects of the IFT System brand including design, procurement, distribution, print, communication with customers and training requirements.
Marketing of IFT System	To be established via Variation Order or deed of variation prior to NTS Implementation Date	Lead and coordinate all IFT Programme marketing and communication activities;
		provide Operator with relevant information to undertake staff training; and
		3. develop a media policy.
Operator staff training	To be established via Variation Order or deed of variation prior to NTS Implementation Date	Provide the Operator with relevant information to undertake staff training; and
		2. fund and provide training to identified trainers employed by the Operator (ie: 'train the trainer') in accordance with clause 15 (Training Requirements) of this Partnering Contract.
Fare structure	To be established via Variation Order or deed of variation prior to NTS Implementation Date	Carry out regular assessments of all types of fares available; assess new options for fare structure and type;

Nature of activity	Scope of Operator's role (indicative	Scope of GWRC's role (indicative
rvature or activity	only).	only).
	NOTE: Scope to be reviewed and updated prior to the NTS Implementation Date and changes recorded in either an approved Variation Order or deed of variation completed in accordance with paragraph 3.4.1	NOTE: Scope to be reviewed and updated prior to the NTS Implementation Date and changes recorded in either an approved Variation Order or deed of variation completed in accordance with paragraph 3.4.1
		 determine changes required to fare structure and types; develop and lead the GWRC Fare Media Transition Plan; and provide all relevant information to the Operator required to enable the updated fare structure to be implemented, including any updates to Annexure 6 (Fares, Ticketing and Enforcement Requirements) and any information required by the Operator to train staff.
Ticketing	To be established via Variation Order or deed of variation prior to NTS Implementation Date	Responsible for all IFT System Equipment (other than the Operator IFT System Equipment for which the Operator retains responsibility under clause 12.4 (IFT System Equipment));
		contract with retail outlets for sale of tickets / other fare media;
		manage and provide all IFT System Equipment and online facilities for top-ups and fare media management;
		undertake the rationalisation of rail tickets and fare products towards the phased withdrawal of products;
		5. provide to the Operator any updates to Annexure 6 (Fares, Ticketing and Enforcement Requirements) relating to ticketing changes;

IFT Phase Two		
Nature of activity	Scope of Operator's role (indicative only). NOTE: Scope to be reviewed and updated prior to the NTS Implementation Date and changes recorded in either an approved Variation Order or deed of variation completed in accordance with paragraph 3.4.1	Scope of GWRC's role (indicative only). NOTE: Scope to be reviewed and updated prior to the NTS Implementation Date and changes recorded in either an approved Variation Order or deed of variation completed in accordance with paragraph 3.4.1
		 6. operate the Metlink website which provides for ticketing and customer service; and 7. operate the Metlink call centre which provides for ticketing and customer service.
Revenue collection and payment to GWRC	To be established via Variation Order or deed of variation prior to NTS Implementation Date	Generate a daily report of ticket sales and top-ups as required by Schedule 5 (<i>Planning, Reporting and Meetings</i>).
IFT System Equipment support	To be established via Variation Order or deed of variation prior to NTS Implementation Date	1. Provide the Operator IFT System Equipment and undertake repairs in accordance with clauses 12 (Wellington Network, Vehicles, assets and systems used in provision of Services) and 20 (GWRC Provision of Wellington Station, GWRC Assets and GWRC Systems) of this Partnering Contract;
		develop real time system generated service failure alert/reporting for all IFT System Equipment;
		provide appropriate training to Operator maintenance staff in accordance with clause 15 (<i>Training Requirements</i>) to allow the Operator to fulfil its maintenance responsibilities;
		develop procedures for the Operator to follow in respect of first line maintenance and

IFT Phase Two		
Nature of activity	Scope of Operator's role (indicative only). NOTE: Scope to be reviewed and updated prior to the NTS Implementation Date and changes recorded in either an approved Variation Order or deed of variation completed in accordance with paragraph 3.4.1	Scope of GWRC's role (indicative only). NOTE: Scope to be reviewed and updated prior to the NTS Implementation Date and changes recorded in either an approved Variation Order or deed of variation completed in accordance with paragraph 3.4.1
		operation of the Operator IFT System Equipment; and 5. carry out independent audits of the IFT System and provide the results, to the extent relevant, to the Operator in accordance with clause 31 (Audit and inspection rights) of this Partnering Contract.
Financial and Performance Regime	Comply with Schedule 6 (Financial and Performance Regime)	Comply with Schedule 6 (Financial and Performance Regime).
Enforcement	To be established via Variation Order or deed of variation prior to NTS Implementation Date	Develop the GWRC Revenue Protection Strategy and incorporate revenue protection and enforcement functions in Annexure 6 (Fares, Ticketing and Enforcement Requirements).
IFT System enhancements	To be established via Variation Order or deed of variation prior to NTS Implementation Date	Follow the procedure set out in Schedule 16 (Change Events and Net Financial Impact) in respect of any Contract Variations resulting from IFT System enhancements.
Privacy and data	To be established via Variation Order or deed of variation prior to NTS Implementation Date	Manage user data and meet all privacy compliance requirements in respect of such data; formulate IFT System privacy policy and protocols; provide Operator with relevant information to undertake staff training where required; and

IFT Phase Two		
Nature of activity	Scope of Operator's role (indicative only). NOTE: Scope to be reviewed and updated prior to the NTS Implementation Date and changes recorded in either an approved Variation Order or deed of variation completed in accordance with paragraph 3.4.1	Scope of GWRC's role (indicative only). NOTE: Scope to be reviewed and updated prior to the NTS Implementation Date and changes recorded in either an approved Variation Order or deed of variation completed in accordance with paragraph 3.4.1
		4. provide the Operator with access to the IFT System data
Return of Snapper System (and associated IFT System Equipment)	To be established via Variation Order or deed of variation prior to NTS Implementation Date	To be established via Variation Order or Deed of Variation prior to NTS Implementation Date

Attachment Three – new Annexure 6 (Fares, Ticketing and Enforcement Requirements)

Annexure 6

Fares, Ticketing and Enforcement Requirements

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1. Purpose of this Annexure

- 1.1 This Annexure sets out the requirements in respect of fares, ticketing and enforcement measures that GWRC requires PTOM Operators to comply with under the Partnering Contract made between GWRC and that PTOM Operator. The issues addressed in this Annexure are as follows:
 - 1.1.1 Fares sets out the terms and conditions associated with public transport fares in the Wellington region;
 - 1.1.2 Ticketing sets out the methods of ticketing and revenue collection to be used by PTOM Operators; and
 - 1.1.3 Enforcement sets out the revenue protection processes and controls used to minimise fare evasion and avoidance.

2. Definitions used in this Annexure

2.1 Capitalised terms used in this Annexure are as defined in the Regional Agreement, or in the relevant Partnering Contract.

3. Process for changing this Annexure

3.1 Any changes to the requirements set out in this Annexure shall occur in accordance with the change process for PT Network Documents set out in the Regional Agreement.

4. Fares

4.1 The PTOM Operator must implement and comply with, and charge fares in accordance with, the GWRC Fare Media Transition Plan and in the case of Bus Units, the GWRC Revenue Protection Policy (Bus).

5. IFT Programme and IFT System

Rail Unit

- 5.1 The following paragraphs 5.2 to 5.3 relate only to the Rail Operator.
- 5.2 Schedule 13 (*IFT Programme*) sets out an overview of the IFT Programme and the Rail Operator's role in the development and implementation of the IFT Programme.
- 5.3 It is anticipated that the IFT Programme will impact on fares, ticketing and enforcement in the following manner:
 - 5.3.1 *Fares*: in IFT Phase One and IFT Phase Two there will be a progressive change and rationalisation of the fares and fare products, details of which are set out in the GWRC Fare Media Transition Plan.
 - 5.3.2 *Ticketing*: on and from the ETS Implementation Date, the Rail Operator will have a more limited role in ticketing.

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5.3.3 *Enforcement*: on and from the ETS Implementation Date, the revenue enforcement methodology will be as set out in paragraph 7 with the main difference being that GWRC warranted officers (appointed by and employed by GWRC) will be engaged in all elements of enforcement.

Bus Units

- 5.4 The following paragraphs 5.5 to 5.7 relate only to Bus Operators.
- 5.5 Clauses 11.2.10, 13.6 and 13.7 of the relevant Partnering Contract provide for the Bus Operator's role in the development and implementation of the IFT Programme.
- It is anticipated that the IFT Programme will impact on ticketing, enforcement and fares in the following manner:
 - 5.6.1 *Ticketing*: on and from the Commencement Date, an electronic ticketing system will be implemented on all Bus Operators' Vehicles. As part of the IFT Programme, the ticketing solution may change and require upgrade as explained further in clause 11.2.10 of the Bus Partnering Contract and Annexure 20 (*Ticketing System*).
 - 5.6.2 *Enforcement*: the revenue enforcement methodology will be as set out in paragraph 7.
 - 5.6.3 Fares and fare products: there will be a progressive change and rationalisation of the fares and fare products, details of which are set out in the GWRC Fare Media Transition Plan.
- 5.7 The Ticketing System comprises the following:
 - 5.7.1 [This will be inserted following the execution of the Rail Partnering Contract in accordance with clause 75.3].

6. Ticketing

This section sets out the methods of ticketing and collection of Farebox Revenue to be implemented by the PTOM Operator.

Rail Unit

- The following paragraphs 6.3 to 6.6 relate only to the Rail Operator.
- 6.3 The following paragraphs (inclusive) shall apply:
 - at all times from the Commencement Date, paragraphs 6.1 to 6.6;
 - 6.3.2 from the Commencement Date up to and including the earlier of the Snapper Implementation Date and the Termination Date, paragraphs 6.17 to 6.21; and
 - 6.3.3 on and from the Snapper Implementation Date until the Termination Date, paragraphs 6.22 to 6.33.

- The process for depositing and transferring Farebox Revenue is set out in clause 48 (*Farebox Revenue and other Revenue*) of the Rail Partnering Contract.
- The Rail Operator shall comply with the GWRC Fare Media Transition Plan.
- A ticket issued by or on behalf of the Rail Operator remains the property of GWRC at all relevant times.

Bus Units

- 6.7 The following paragraphs 6.8 to 6.16 relate only to Bus Operators.
- 6.8 Ticket media shall include paper tickets and electronic fare payment media.
- The Bus Operator shall accept and collect Farebox Revenue on board Vehicles by the following means:
 - 6.9.1 allowing customers to tag on and off with an electronic fare payment device; and
 - 6.9.2 selling paper tickets to customers for cash payment.
- All fare collection and ticketing must be recorded by the Bus Operator using the Operator Ticketing Equipment.
- 6.11 A ticket issued by or on behalf of a Bus Operator remains the property of GWRC at all relevant times.
- 6.12 The Operator shall not be responsible for the sale, reloading and renewing of electronic fare payment media.
- 6.13 The process for depositing and transferring Farebox Revenue is set out in clause 40 (*Farebox Revenue and other Revenue*) of the Bus Partnering Contract.
- 6.14 GWRC shall be responsible for developing the branding of the Ticketing System.
- 6.15 The Bus Operator shall sell and accept the fare products set out in and comply with the GWRC Fare Media Transition Plan at the prices and in accordance with the conditions set out therein.
- 6.16 The Bus Operator shall obtain from GWRC paper ticket rolls and maintain supply levels of other consumables used by the Operator in relation to the Ticketing System.

Until the Snapper Implementation Date Rail Unit

- 6.17 The following paragraphs 6.18 to 6.33 relate only to the Rail Operator.
- 6.18 The Rail Operator shall sell tickets and collect Farebox Revenue in accordance with the GWRC Fare Media Transition Plan.
- 6.19 The Rail Operator shall, and shall procure that all Ticket Agents:
 - 6.19.1 sell the fare products set out in the GWRC Fare Media Transition Plan at the prices set out therein;

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- 6.19.2 procure and keep sufficient stocks of paper tickets that meet GWRC's requirements; and
- 6.19.3 keep accurate records of all paper ticket stock ordered, held and sold and report to GWRC in the revenue reports referred to in Schedule 5 all paper tickets which are lost, stolen or not accounted for in the Rail Operator's records.
- 6.20 Revenue collection and transfer to the Farebox Account shall be in accordance with clause 48 (*Farebox Revenue and other Revenue*) of the Rail Partnering Contract.
- 6.21 The Rail Operator shall bear the cost associated with ticket sales, including:
 - (a) ticketing staff;
 - (b) credit card fees;
 - (c) Ticket Agent commission;
 - (d) costs for collecting and depositing revenue into the Farebox Account;
 - (e) equipment required in order to carry out ticket sales, including EFTPOS machines; and
 - (f) any other costs relating to ticket sales.

On and from the Snapper Implementation Date - Rail Unit

- 6.22 The Rail Operator shall sell tickets and collect Farebox Revenue in accordance with the GWRC Fare Media Transition Plan.
- 6.23 [not used]
- 6.24 [not used]
- 6.25 If buses are used as an alternative transport arrangement in accordance with the Rail Partnering Contract:
 - 6.25.1 where such buses are not IFT Compatible, the Rail Operator ensure that best endeavours have been used to procure IFT Compatible vehicles,
 - 6.25.2 the Rail Operator shall, in the case of IFT Compatible vehicles, ensure that Rail Operator staff sell cash fares to any customers that do not have Snapper cards, ensure that the Snapper Ticketing Equipment (or any replacement IFT System Equipment) has been turned on and is ready for use so that customers are able to tag on and off the vehicle, that customers boarding tag on and off the vehicle, and that the driver is checking that all customers either tag on or have purchased a paper ticket prior to boarding the replacement service.
- 6.26 [not used]
- 6.27 [not used]
- 6.28 Fare media may be supplied by either GWRC or third parties.

- 6.29 Fare media may be sold and reloaded/renewed by the Operator at all Ticket Offices.
- Fare media may be sold and reloaded/renewed by other IFT System Equipment, online and through the Metlink call centre, each of which shall be GWRC's responsibility.
- 6.31 [not used]
- 6.32 The Rail Operator shall not permit any anti-public transport advertising or messaging to be printed on paper ticket media. The Rail Operator shall seek GWRC's consent to use the reverse of paper ticket media for advertising / messaging.
- 6.33 GWRC shall be responsible for developing the branding of the IFT System.

7. Enforcement

Background - Rail Unit

- 7.1 The following paragraphs 7.2 to 7.6 relate only to the Rail Operator.
- 7.2 [not used]
- 7.3 Revenue protection covers the activities for ensuring that people travelling on public transport have paid the appropriate fare to travel. Revenue protection is a series of processes and controls that are implemented to ensure that fare evasion and avoidance are minimised and that all revenues collected are fully accounted for and are applied to the intended parties.

Revenue protection obligations - Rail Unit

- 7.4 The Rail Operator shall minimise fare evasion by:
 - 7.4.1 providing a visible and effective deterrent to committing Ticket Offences;
 - 7.4.2 on and from the Snapper Implementation Date:
 - (a) working with GWRC employed warranted officers to enforce Ticket Offences;
 - (b) employing train managers and passenger operators to assist GWRC employed warranted officers to enforce Ticket Offences; and
 - (c) implementing and complying with the GWRC Revenue Protection Strategy.
- 7.5 The Rail Operator shall comply the Rail Operator's Revenue Protection and Customer Service Plan developed under Schedule 5 (*Planning, Reporting and Meetings*) and as updated to reflect and be consistent with the GWRC Revenue Protection Strategy.
- 7.6 The means of measuring the Rail Operator's compliance with its revenue protection obligations and the consequences of failure by the Rail Operator to comply with its

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obligations are set out in Schedule 3 (*Passenger Services*) and Schedule 6 (*Financial and Performance Regime*).

- 7.7 [not used]
- 7.8 [not used]
- 7.9 [not used]
 - 7.9.1 [not used]
 - 7.9.2 [not used]
- 7.10 [not used]
 - 7.10.1 [not used]
 - 7.10.2 [not used]
- 7.11 [not used]

Background and acknowledgement - Bus Units

- 7.12 The following paragraphs 7.13 to 7.20 relate only to Bus Operators.
- 7.13 Revenue protection covers the activities for ensuring that people travelling on public transport have paid the appropriate fare to travel. Revenue protection is a series of processes and controls that are implemented to ensure that fare evasion and avoidance are minimised and that all revenues collected are fully accounted for and are applied to the intended parties.
- 7.14 The Operator acknowledges and agrees that GWRC may use the closed circuit television system installed on Vehicles in order to carry out revenue protection activities.

Revenue protection obligations - Bus Units

- 7.15 The Bus Operator shall minimise fare evasion by:
 - 7.15.1 requiring drivers operating Vehicles to take steps to minimise and report Ticket Offences and to carry out the functions referred to in the GWRC Revenue Protection Policy (Bus);
 - 7.15.2 implementing and complying with the GWRC Revenue Protection Policy (Bus);
 - 7.15.3 take all reasonably practicable steps to ensure that passengers comply with the Conditions of Carriage to the extent that it relates to fares and tickets; and
 - 7.15.4 give effect to the Partnering Principles in clause 2.8 (*Partnering Principles*) of the Bus Partnering Contract by working with GWRC to reduce Ticket Offences.

- 7.16 The Bus Operator shall comply with the Bus Operator's Revenue Protection Plan, developed under Schedule 5 (*Planning, Reporting and Meetings*) to reflect and be consistent with the GWRC Revenue Protection Policy (Bus).
- 7.17 The means of measuring the Bus Operator's compliance with its revenue protection obligations and the consequences of failure by the Bus Operator to comply with its obligations are set out in Schedule 5 (*Planning, Reporting and Meetings*) and Schedule 6 (*Financial and Performance Regime*).
- 7.18 The Bus Operator must take all reasonably practicable steps to ensure that passengers have a ticket valid for the Scheduled Service or Special Event Service on which the customer is travelling and that passengers do not commit a Ticket Offence by:
 - 7.18.1 drivers ensuring that passengers either purchase a ticket or tag on using the Operator Ticketing Equipment as they board a Vehicle;
 - 7.18.2 if the passenger has a concession ticket, drivers requiring such passengers to provide the corresponding concession entitlement;
 - 7.18.3 in respect of electronic fare media, drivers monitoring passengers for their compliance with requirements of the Operator Ticketing Equipment, including monitoring any passengers who tag off at a Bus Stop which is not the Bus Stop at which the passenger alights from the Vehicle; and
 - 7.18.4 complying with the GWRC Fare Media Transition Plan and the GWRC Revenue Protection Policy (Bus).
- 7.19 If a customer has committed a Ticket Offence, the Bus Operator must comply with the GWRC Revenue Protection Policy (Bus).
- 7.20 For the purposes of determining whether a Ticket Offence has been committed:
 - 7.20.1 a ticket is valid for a Trip or entry into a Designated Area if:
 - (a) any fare for the Trip or entry has been paid;
 - (b) the whole of the Trip or the entry is authorised on the face of the ticket;
 - (c) in the case of a concession ticket, it either itself constitutes, or is accompanied by, evidence of a current concession entitlement to rely on that ticket; and
 - (d) it is used in accordance with all other conditions for its use applicable in respect of that class of ticket;
 - 7.20.2 only the person who first uses a ticket for a Trip or an entry to a

 Designated Area is entitled to use that ticket for that Trip or entry and any
 subsequent Trip or entry to a designated area authorised by the ticket;
 - 7.20.3 a ticket is invalid if:

- (a) it has been altered, defaced or mutilated in any material particular; or
- (b) it becomes, or has been made, illegible in any material particular; or
- (c) information stored in or on the ticket in an electronic chip has been altered or destroyed or made inaccessible in any material particular;
- 7.20.4 evidence of a concession entitlement is invalid if the card or other document which constitutes that evidence (other than a ticket):
 - (a) has been altered, defaced or mutilated in any material particular; or
 - (b) becomes, or has been made, illegible in any material particular; and
- 7.20.5 other fare media is valid for a Trip or entry into a Designated Area if:
 - (a) [This will be inserted following the execution of the Rail Partnering Contract in accordance with clause 75.3].



To: Wellington Regional Council and Greater Wellington Rail Limited (Beneficiaries)
PO Box 11646, Manners Street
Wellington 6142, New Zealand
fiona.abbott@gw.govt.nz

Attention: Fiona Abbott, Manager, Assets and Infrastructure
Cc: Matthew Chote, Principal Account Manager, Rail & Ferry

Date: 09 November 2022

Dear Fiona

RAIL PARTNERING CONTRACT (PT0416) DEED OF VARIATION: SNAPPER ON RAIL ACKNOWLEDGEMENT IN RESPECT OF PARENT COMPANY GUARANTEE

Background

We refer to the Secondary Parent Company Guarantee dated 15 March 2016 (Guarantee) by which we, as the Secondary Guarantor, provided guarantees and indemnities in favour of the Beneficiaries to guarantee the performance of the Relevant Documents by Transdev Wellington Limited (company number 5164521) (Operator).

The Relevant Documents include the Partnering Contract in respect of the Greater Wellington Metro Rail Service (reference PT0416) dated 10 March 2016 (Partnering Contract).

This acknowledgement has been requested by the Beneficiaries, in accordance with clause 6.2 of the Guarantee, in respect of the deed of variation to the Partnering Contract entitled "Deed of Variation: Snapper on Rail" made between the Beneficiaries and the Operator and dated on or about the date of this acknowledgement (**Deed of Variation**).

Unless otherwise defined in this letter, capitalised terms used in this letter have the same meaning given to those terms in the Guarantee.

Acknowledgement

We hereby acknowledge and agree that, pursuant to clause 6.1 of the Guarantee, our obligations and liabilities under the Guarantee and the guarantees and indemnities

TRANSDEV GROUP

Share Capital: 1,206,035,927.20 €

Registered office:

Immeuble Crystal – 3 Allée de Grenelle – 92130 Issy-Les-Moulineaux (France)

521 477 851 RCS NANTERRE

contained in it extend to any amendment, variation, increase, extension or addition (in each case, however fundamental) from time to time of or to the Relevant Documents or the Guaranteed Obligations, past and future, whether or not we provide any express acknowledgement of the same.

However, because the amendments and variations to the Partnering Contract effected under the Deed of Variation are made by way of deed, rather than as a Contract Variation or a Minor Contract Variation under Schedule 16 of the Partnering Contract, the Beneficiaries have requested that we, as Secondary Guarantor give this acknowledgement pursuant to clause 6.2 of the Guarantee.

Accordingly, we acknowledge and confirm in respect of the Deed of Variation (including the amendments and variations to the Partnering Contract effected thereunder):

- 1. such amendments and variations do not release, prejudice, impair or discharge any of our obligations or liabilities under the Guarantee; and
- 2. to the extent that the amendments or variations increase, vary or amend the obligations or liabilities of the Operator under the Relevant Documents, we consent to the same and confirm that our obligations and liabilities under the Guarantee shall be similarly increased, varied and amended.

Yours faithfully

Authorized signatory



To: Wellington Regional Council and Greater Wellington Rail Limited (**Beneficiaries**)

PO Box 11646, Manners Street Wellington 6142, New Zealand fiona.abbott@gw.govt.nz

Attention: Fiona Abbott, Manager, Assets and Infrastructure

Cc: Matthew Chote, Principal Account Manager, Rail & Ferry

Date: 21 November 2022

Dear Fiona

RAIL PARTNERING CONTRACT (PT0416) DEED OF VARIATION: SNAPPER ON RAIL

ACKNOWLEDGEMENT IN RESPECT OF PARENT COMPANY GUARANTEE

Background

We refer to the Primary Parent Company Guarantee dated 10 March 2016 (**Guarantee**) by which we, as the Primary Guarantor, provided guarantees and indemnities in favour of the Beneficiaries to guarantee the performance of the Relevant Documents by Transdev Wellington Limited (company number 5164521) (**Operator**).

The Relevant Documents include the Partnering Contract in respect of the Greater Wellington Metro Rail Service (reference PT0416) dated 10 March 2016 (**Partnering Contract**).

This acknowledgement has been requested by the Beneficiaries, in accordance with clause 6.2 of the Guarantee, in respect of the deed of variation to the Partnering Contract entitled "Deed of Variation: Snapper on Rail" made between the Beneficiaries and the Operator and dated on or about the date of this acknowledgement (**Deed of Variation**).

Unless otherwise defined in this letter, capitalised terms used in this letter have the same meaning given to those terms in the Guarantee.

Acknowledgement

We hereby acknowledge and agree that, pursuant to clause 6.1 of the Guarantee, our obligations and liabilities under the Guarantee and the guarantees and indemnities contained in it extend to any amendment, variation, increase, extension or addition (in each case, however fundamental) from time to time of or to the Relevant Documents or the Guaranteed Obligations, past and future, whether or not we provide any express acknowledgement of the same.



However, because the amendments and variations to the Partnering Contract effected under the Deed of Variation are made by way of deed, rather than as a Contract Variation or a Minor Contract Variation under Schedule 16 of the Partnering Contract, the Beneficiaries have requested that we, as Primary Guarantor give this acknowledgement pursuant to clause 6.2 of the Guarantee.

Accordingly, we acknowledge and confirm in respect of the Deed of Variation (including the amendments and variations to the Partnering Contract effected thereunder):

- 1. such amendments and variations do not release, prejudice, impair or discharge any of our obligations or liabilities under the Guarantee; and
- 2. to the extent that the amendments or variations increase, vary or amend the obligations or liabilities of the Operator under the Relevant Documents, we consent to the same and confirm that our obligations and liabilities under the Guarantee shall be similarly increased, varied and amended.

