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RailCorp Ref: RC07549 File No: PT06890

9 June 2011

Reliance Rail Pty Limited Suite 2, Level 9 333 George Street SYDNEY NSW 2000

Attention: Mr Ian Hunt

Dear lan,

PROJECT CONTRACT NO. C01645
RAILCORP ROLLING STOCK PPP CONTRACT
REF: RAILCORP LETTER (RC07207) DATED 27 MAY 2011
RAILCORP LETTER (RC07550) DATED 3 JUNE 2011
RAILCORP LETTER (RC07590) DATED 6 JUNE 2011
RAILCORP LETTER (RC07596) DATED 7 JUNE 2011
RAILCORP LETTER (RC07625) DATED 8 JUNE 2011

SUBJECT: FINAL CONDITIONAL DETERMINATIONS REGARDING DEFECTS FOR SET 1 (TRAIN A03)

Further to RC07207, RC07550, RC07590, RC07596 and RC07625, we attach a consolidated spreadsheet setting out RailCorp's final determinations in relation to the categorisation of various Defects (including those not being Minor Defects), unpassed or unperformed Tests and other requirements affecting Set 1 (Train AO3). These final conditional determinations may differ from the indicative determinations attached to the above referenced letters.

Among other things, the attached spreadsheet provides that, subject to conditions 1 to 5 below, RailCorp is prepared to waive in respect of:

- a. specified Defects, the requirement to correct the Defect before Practical Completion of the Set;
- specified Tests which have not been passed or performed, the requirement for Practical Completion that the Set has passed such Tests and the results of such Tests have been provided to RailCorp's Representative; and
- specified other requirements for Practical Completion which have not been satisfied, the requirement to satisfy such requirements before Practical Completion,

and treat each such Defect, unpassed or unperformed Test or other unsatisfied requirement as if it was a Minor Defect for Set 1.

The conditions upon which RailCorp is prepared to grant these waivers are that:

- The Defect, Test or requirement must be corrected, passed or satisfied (as applicable) in respect of Set 1 by the "Timescale for Resolution" specified in the spreadsheet;
- Where the Timescale for Resolution is expressed to be Practical Completion (PC) of a subsequent Set, the correction of the Defect, passing of the Test or satisfaction of the requirement (as applicable) will be a precondition to Practical Completion of that subsequent Set for the purposes of clause 18.1(j) of the Project Contract;



- The Defect, Test or requirement must be corrected, passed or satisfied (as applicable) for Set 1 to achieve Final Completion;
- 4. If a Set is "late" or "very late" into or in service, or is "cancelled" while in service or when due to enter service, due to a failure by RailCorp to follow a "work around" procedure in respect of the Defect, Test or requirement, then the lateness or cancellation will be deemed to be due to a PPP Co Related Problem in respect of the Set; and
- Any other conditions set out in the spreadsheet in respect of the relevant Defect, Test or requirement must also be met.

The spreadsheet also reflects your commitment to supply sufficient On Train Technicians to provide advice to the Crew and on-board technical support in relation to specified Defects for every Availability Period until such time as the relevant Defects are rectified. The Set will not be considered "Available" if this commitment is not honoured.

As foreshadowed in our above referenced correspondence, would you please:

- · confirm Reliance Rail's agreement to the conditions and terms referred to in this letter; and
- confirm that Reliance Rail has obtained any consents which are required under the Debt Financing Documents as a consequence of the waivers set out in the spreadsheet,

by countersigning this letter where indicated below.

RailCorp notes that, in the absence of Reliance Rail's agreement, RailCorp will, unfortunately, be unable to grant the waivers identified in the spreadsheet. Unless the relevant Defects, unpassed Tests or unsatisfied requirements are corrected, passed or satisfied (as applicable) by close of business on 10 June 2011 (or such later date as Reliance Rail may agree to as the date by which RailCorp must complete its inspection activities and determine whether or not Practical Completion has been achieved, as contemplated by the Project Contract), RailCorp will have no choice but to issue a notice advising that Practical Completion has not been achieved.

Yours sincerely,

Frederick George Paton RailCorp's Representative Rolling Stock PPP

Attachment: Set 1 (Train A03) Minor Defects - Final consolidated determinations - 9 June 2011

By countersigning this letter, Reliance Rail confirms:

- · its agreement to the conditions and terms referred to in this letter; and
- that it has obtained any consents which are required under the Debt Financing Documents as a consequence of the waivers set out in the spreadsheet attached to this letter.

Signature of Reliance Rail's Representative

Date

9 June 2011 - RailCorp's Final Conditional Determinations are set out in the attached table - to be read in conjuction with RailCorp letter RC07549

- 1. This table sets out RailCorp's determinations in relation to the categorisation of various Defects, unpassed Tests and other issues affecting Set 1 (Train A03).

 2. Where the RailCorp determination is "Minor Defect". RailCorp agrees that the Defect falls within the definition of Minor Defect under the Project Contract and, as such, need not be corrected prior to Practical Completion of Set 1. RailCorp notes that Reliance Rail must expeditiously and diligently rectify all Minor Defects listed in the Certificate of Practical Completion of the Set (cl. 18.8), and that Final Completion of the Set will not be achieved until all such Minor Defects have been corrected (cl. 20.1(a)) 3. Where the RailCorp determination is "Treat as if Minor Defect", RailCorp is prepared, subject to the conditions specified below, to waive:
- (a) where the issue is a Defect, the requirement to correct the Defect before Practical Completion of the Set.

- (b) where the issue is an unpassed or unperformed Test, the requirement for Practical Completion that the Set has passed such Tests and the results of such Tests have been provided to RailCorp's Representative; and (c) where the issue is some other requirement for Practical Completion which has not been satisfied, the obligation to satisfy such requirement before Practical Completion of the Set, and treat each such Defect, unpassed or unperformed Test or other unsatisfied requirement as if it was a Minor Defect for Set 1. The conditions upon which RailCorp is prepared to grant these waivers are that:

 (d) The Defect, Test or requirement must be corrected, passed or satisfied (as applicable) in respect of Set 1 by the "Timescale for Resolution" specified in the table;

 (e) Where the Timescale for Resolution is expressed to be Practical Completion (PC) of a subsequent Set, the correction of the Defect, passing of the Test or satisfaction of the requirement (as applicable) will be a precondition to Practical Completion of that subsequent Set for the purposes of clause 18.1(i) of the Project Contract;
- (f) The Defect, Test or requirement must be corrected, passed or satisfied (as applicable) for Set 1 to achieve Final Completion; and
 (g) If a Set is "late" or "very late" into or in service, or is "cancelled" while in service or when due to enter service, due to a failure by RailCorp to follow a "work around" procedure in respect of the Defect, Test or requirement, then the lateness or cancellation will be deemed to be due to a PPP Co Related Problem in respect of the Set; and
- (h) Any other conditions set out in the table in respect of the relevant Defect. Test or requirement must also be met All costs incurred in complying with these conditions are to be borne by PPP Co.
- 4. All determinations set out in this table are in respect of Set 1 (Train A03) only, and should not be taken to apply to subsequent Sets

RailCorp has the discretion to determine whether compliance is to be delivered by either: - a design change; or - a RFTA to amend the Train Performance Specification.	F00310 Crew Transverse Door Function Test Failure (Panic bar operating force). The force required to operate the door panic bar does not meet the specification of 19.5 N. However, it is noted that the industry standards (AS 1428) exempts sealed fire doors, which the crew transverse door is, as these doors need to withstand significant strength loads and provide an effective barrier to noise, fire and smoke.	Expeditiously and diligently,	RC06501	Minor Defect	RR#10436	MD-0067	ø
Test Report CTR01220-001 to be re-submitted to RailCorp demonstrating all outstanding test steps successfully passed, with the absence of resonance confirmed by inclusion of CER01802	Part of CTR01220-001 is partially incomplete in that compliance of TPS requirement *6.2.17 Car Test Report CTR01220-001 to be re-submitted to RailCorp demonstrating all Body Natural Frequencies.1* has not yet been verified pending completion of Engineering outstanding test steps successfully passed, with the absence of resonance of CER01802. Analysing the Acceleration data.	Set 11 PC	RC07207	Treat as if Minor Defect	RR#11765	MD-0065	Oh
Revised compliant heater arrangement to be implemented and re-tested (CTI00860), with Test Report submitted demonstrating all test steps are successfully passed	Expeditiously and CTI00860 CN01 Climate Control Vehicle Miscellaneous Type Test does not meet requirements of (TPS.9.25.19.3) Operation of both heater stages of the guard's side foot heater would cause the heating of will be rectified by Deg C. This would present a burn hazard to crew when stage two heating is selected for this 30/6/11	Expeditiously and diligently. RR has indicated this MI will be rectified by 30/6/11	RC07207	Minor Defect	RR#11698	MD-0031	4
Test to be completed (CTI00863) and Test Report to be submitted to RailCorp demonstrating all test steps successfully passed PPP Co to ensure that any additional preparation required is completed such that saloon temperatures are within operational limits prior to revenue service	CTi00863 CN01 Climate Control Car Heat Up Type Test Test can not be conducted as it requires ambient temperatures of 0-5 degrees Celsius, so that the climate control can demonstrate that its performance and meeting the requirements (TPS 9 25.5) for heating the train within 30 minutes.	Earlier of Set 2 PC and 31/7/11	RC06501	Treat as if Minor Defect	RR#10436	MD-0018	ω
Panels to be rectified as per RC05200 prior to Final Completion	als that surround the windows in the upper/lower decks have a finish which is the to requirements within the TPS 6.2.23 Protective Coatings.	Expeditiously and diligently (cl. 18.8). non-compliant to RR has indicated this MD MCF number 35 will be rectified within 6 months of Set 1 PC	RC05200 RC06501	Minor Defect	RR#10436	MD-0001	-
Rectification Method & relevant Conditions of Acceptance	Defect/Issue	Timescale for Resolution	RailCorp Ref	RailCorp Determination	Reliance Rail Ref	ō	Item

Item	ō	Reliance Rail Ref	RailCorp Determination	RailCorp Ref	Timescale for Resolution	Defect/Issue	Rectification Method & relevant Conditions of Acceptance
7	MD-0068	RR#10436	Minor Defect	RC06501	Expeditiously and diligently.	F00311 Crew Transverse Door Function Self Closing Failure (Self closing failure due to track/vehicle cant). The Crew Transverse Door is fitted with an automatic door closer, however it is not able to meet all the test conditions in demonstrating that it can self close and lock. Requirement/test steps have been set-up to demonstrate that the door can automatically close in all anticipated operating environments (typically track conditions where the train is either leaning to one side as it negotiates a curve or is climbing/descending a slope). The automatic door close is able to close the door in 13 of the 15 test steps/scenarios created to demonstrate anticipated operating scenarios.	RailCorp has the discretion to determine whether compliance is to be delivered by either: - a design change; or - a RFTA to amend the Train Performance Specification.
9	MD-0163	RR#10436 RR#10698	Treat as if Minor Defect	RC06513 RC06501	Set 1 PC + 6 months or Set 7 PC (whichever is sooner)	Update of Simulators to reflect the configuration and characteristics of Train A03 at Practical Completion to be deferred.	Simulators to be updated and relevant regression testing to be completed and Test Reports submitted demonstrating test steps successfully passed
10	MD-0164	RR#10436	Treat as if Minor Defect	RC04643 RC06501	Set 7 PC	CMR 4.6.5(b) Issues list (Design issues to be developed during the Delivery Phase) has 14 items that have been agreed to be evaluated during initial revenue service operation. These 14 items are listed below	RailCorp is prepared to treat each of these [14] items as if each were a Minor Defect, on the additional condition that: each item is the subject of further design development and/or assessment during initial operation; and any further work required to make the item compliant with the Contract is completed.
10.11	MD-0164	RR#10436	Treat as if Minor Defect	RC04643	Set 7 PC	(1) Item#21: FDS panel effectiveness (6) Item#83: FDS panel effectiveness (7) Item#84: FDS panel effectiveness (8) Item#85: FDS panel effectiveness	
10.13	MD-0164	RR#10436	Treat as if Minor Defect	RC04643	Set 7 PC	(2) Item#22: Crew Seats are non-compliant	Confirm compliant Crew Seats in Final Design Documentation
10.14	MD-0164	RR#10436	Treat as if Minor Defect	RC04643	Set 7 PC	(3) Item#24: Detrainment Ramp Desktop Cover	
10.15	MD-0164	RR#10436	Treat as if Minor Defect	RC04643	Set 7 PC	(4) Item#76: Train Preparation prompts on eTIS(5) Item#77: Fault Finding hints / help on eTIS	Implement Train Preparation prompts and Fault Finding hints / help functionality in eTIS and conduct relevant re-testing and submission of Test Report with test steps successfully passed
10.16	MD-0164	RR#10436	Treat as if Minor Defect	RC04645	Set 7 PC	(9) Item#23: Crew Alerts & Alarms	
10.17	MD-0164	RR#10436	Treat as if Minor Defect	RC04701 & RC04711	Set 7 PC	(10) Item#27: Detrainment Ramp Desktop Cover	
10.18	MD-0164	RR#10436	Treat as if Minor Defect	RC04786	Set 7 PC	(11) Item#3: Visibility of CCTV screens in crew cab	Linked to MD-0635 which has been raised following initial operational experience
10.19	MD-0164	RR#10436	Treat as if Minor Defect	RC04821	Set 7 PC	(12) Item#103: eTIS control of park brake	Implement eTIS software with this functionality removed and conduct relevant re-testing and submission of Test Report with test steps successfully passed
10.21	MD-0164	RR#10436	Treat as if Minor	RC04617 &	Set 7 PC	(13) Item#120: Metronet Radio Switch illumination	

Item	ID	Reliance Rail Ref	RailCorp Determination	RailCorp Ref	Timescale for Resolution	Defect/issue	Rectification Method & relevant Conditions of Acceptance
10.22	MD-0164	RR#10436	Treat as if Minor Defect	RC07230	Set 7 PC	(14) Item #78: Special Train Notices (STN's)	Implement functionality in eTIS v.12 with relevant re-testing and submission of Test Report with test steps successfully passed
11	MD-0165	RR#12044	Treat as if Minor Defect	RC07521	Set 1 PC + 3 months	Final Design Documentation as defined in CER01627 does not provide Configuration Baseline for Set (Project Contract Clause 18.1(c)) Final design documentation may not be completed in time for the introduction of train set A3. This has no impact on the current functionality or configuration of Set A3 and is only proposed as a minor defect to allow recording of this issue for those design updates which are not concluded by PC of Set A3.	All necessary design documentation (as per CER01627 Rev D) released to verify baseline configuration at Set 1 PC.
13	MD-0194	RR#10685	Minor Defect	RC06501	indicated this MD would be rectified by 30/4/11. This date has now lapsed	TPS 11.11.3	Compliant software solution to be re-tested and submission of Test Report with test steps successfully passed
14	MD-0195	RR#11688	Minor Defect	RC07207	diligently. RR has indicated this MD	FRACAS 1912 No control of speakers (internal / external / both) from Digital Voice Announcer In the event of the timetable requiring an additional external message at certain stations (e.g., 'mind the gap' at Wollstonecraft station), the automatic message cannot be played over the external speakers. TPS 11.11.7	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
15	MD-0200	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	FRACAS 2142 eTIS alerts are ordered on the basis of latest received rather than oldest first TPS Appendix K	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
16	MD-0205	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	eTIS does not record user actions on the Display Units that modify the state of the Train (e.g. Play Digital Voice Annunciator message, Cut-in/out Traction etc) in Maintenance Logs (Events). This is not related to Event Recorder data. EKE has not implemented this function TDB 7.4.3.19	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed

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MD-0207 RR#11688	MD-0207 RR#11688 MD-0209 RR#11688 MD-0210 RR#11688	MD-0207 RR#11688 MD-0209 RR#11688 MD-0210 RR#11688	MD-0207 RR#11688 MD-0209 RR#11688 MD-0210 RR#11688 MD-0211 RR#11688
Minor Defect RC07207			
Expeditiously and diligently, diligently, RR has indicated this MD will be rectified prior to Set 2 PC	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC		
The DDU screen D535 displays Main Reservoir pressure, but does not display 'Main Reservoir charge time' TPS Appendix K	D535 displays Main Reservoir pressure, but the pressure of inconsistent route information entered into ation	D535 displays Main Reservoir pressure, but finconsistent route information entered into ation	D535 displays Main Reservoir pressure, but of inconsistent route information entered into ation) does not show passenger count) does not show passenger count
		0,	0.
	RR has indicated this MD will be rectified prior to TPS Appendix K Set 2 PC RR#11688 Minor Defect RC07207 Expeditiously and diligently. RR has indicated this MD RR has indicated this MD will be rectified prior to TPS Appendix K Set 2 PC RR has indicated this MD FRACAS 1986 No eTIS display of inconsistent route information entered into Digital Voice Announcer compared to actual train location FRACAS 1986 No eTIS display of inconsistent route information entered into Digital Voice Announcer compared TPS Appendix K	RR#11688 Minor Defect RC07207 Expeditiously and diligently. RR#11688 Minor Defect RC07207 Expeditiously and set 2 PC RR#11688 RR has indicated this MD will be rectified prior to Set 2 PC RR#11688 Minor Defect RC07596 Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC RR has indicated this MD TPS Appendix M FRACAS 2029 etTIS screen (101) does not show passenger count RR has indicated this MD TPS Appendix M Set 2 PC RR has indicated this MD TPS Appendix M Set 2 PC	RR#11688 Minor Defect RC07207 Expeditiously and diligentity. RR has indicated this MD Set 2 PC Expeditiously and diligentity. RR has indicated this MD will be rectified prior to Set 2 PC RR has indicated this MD FRACAS 2029 diligently will be rectified prior to Set 2 PC RR has indicated this MD TPS Appendix M will be rectified prior to Set 2 PC RR has indicated this MD TPS Appendix M will be rectified prior to Set 2 PC RR has indicated this MD TPS Appendix M will be rectified prior to Set 2 PC RR has indicated this MD TPS Appendix M FRACAS 1895 Expeditiously and will be rectified prior to Set 2 PC RR#11688 Minor Defect RC07207 Expeditiously and Giligently.
	RR#11688 Minor Defect RC07207 Expeditiously and diligently. We eTIS display of inconsistent route information entered into Digital Voice Announcer compared to actual train location RR has indicated this MD will be rectified prior to Set 2 PC. Expeditiously and FRACAS 1986 No eTIS display of inconsistent route information entered into Digital Voice Announcer compared to actual train location TPS Appendix K	RR#11688 Minor Defect RC07207 Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC RR#11688 Minor Defect RC07596 Expeditiously and will be rectified prior to Set 2 PC RR has indicated this MD TPS Appendix K Set 2 PC RR has indicated this MD TPS Appendix M will be rectified prior to Set 2 PC RR has indicated this MD TPS Appendix M screen (101) does not show passenger count RR has indicated this MD TPS Appendix M set 2 PC	RR#11688 Minor Defect RC07207 Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC RR#11688 Minor Defect RC07596 Expeditiously and diligently. RR has indicated this MD TPS Appendix K Set 2 PC RR has indicated this MD TPS Appendix M Set 2 PC RR has indicated this MD TPS Appendix M Set 2 PC RR has indicated this MD TPS Appendix M Set 2 PC RR has indicated this MD TPS Appendix M Set 2 PC Set 2 PC RR has indicated this MD TPS Appendix M Set 2 PC Set 2 PC FRACAS 1895 FRACAS 1895 FRACAS 1895 FRACAS 1895 FRACAS 1895 FRACAS 1895

Item 23	MD-0213	Reliance Rall Ref RR#10685	RailCorp Determination Minor Defect	RailCorp Ref RC06501	Timescale for Resolution Expeditiously and diligently. RR has previously indicated this MD would	Defect/Issue eTIS printer status eTIS printer status the printer is not displayed on the eTIS driver display unit and guard display unit. This will result in the driver having to use other means (e.g. see if printer prints) to determine the printer status during preparation duties.
					indicated this MD would be rectified by 31/3/11. This date has now lapsed and the work remains incomplete. RR have indicated this MD will now be rectified by Set 2 PC	TPS Appendix K
24	MD-0214	RR#11688	Minor Defect	RC07207	Expeditiously and diligently.	FRACAS 1816 Compliant software solutio In the event that Crew wish to record a fault on the Set, there is no ability to enter 'Fault data' via steps successfully passed the electronic Train Information System Display Units
					RR has indicated this MD will be rectified prior to Set 2 PC	TPS Appendix K
25	MD-0215	RR#11688	Minor Defect	RC07207	Expeditiously and diligently.	eTIS does not punctuate messages displayed to passengers via the IDIs (e.g. fails to insert spaces between multi-fragment announcements).
					RR has indicated this MD TPS.11.11.3 will be rectified prior to Set 2 PC	TPS.11.11.3
26	MD-0217	RR#10685	Minor Defect	RC06501	Expeditiously and diligently. RR has previously indicated this MD would be rectified by 31/5/11. This date has now lapsed TDB.7.4.3 and the work remains incomplete. RR have indicated this MD will now be rectified by Set 2. PC	No download of 'train certificate' to PSU The lack of this feature does not prevent the crew from doing train preparation and producing the train certificate. The crew can use a paper copy train certificate or view a screen display of the train certificate. TDB.7.4.3
27	MD-0218	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	In the event that RailCorp wish to modify configurable software parameters (e.g. Internal Destination indicator flashing and scrolling parameters), there is no Portable Service Tool function to perform this TPS Appendix K
28	MD-0219	RR#11688	Minor Defect	RC07207	Expeditiously and diligently.	In the event that DEDIR wishes to record information from the electronic Train Information System, there is no in built function to do so. Function Description - eTIS includes a programmable recorder

36 MD-0243 RR#10685	35 MD-0242 RR#10489	34 MD-0241 RR#10489	33 MD-0240 RR#10489	31 MD-0228 RR#11688	30 MD-0227 RR#11688	29 MD-0220 RR#11688	Item ID Reliance Rail Ref
Minor Defect	89 Minor Defect	Minor Defect	89 Minor Defect	Minor Defect	88 Minor Defect	88 Minor Defect	ce RailCorp ef Determination
RC06501	RC06501	RC06501	RC06501	RC07207	RC07521	RC07207	RailCorp Ref
Expeditiously and diligently. RR has previously indicated this MD would be rectified by 31/3/11. This date has now tapsed and the work remains incomplete BB have	Expeditiously and iDI Configuration diligently. The IDI should homessage. RR has indicated this MD will be rectified by PC Set TPS Appendix A	Expeditiously and diligently. RR has indicated this MD will be rectified by PC Set	Expeditiously and diligently. RR has indicated this MD will be rectified by PC Set	Expeditiously and Train Inspection diligently. RR has indicated this MD TPS Appendix N will be rectified prior to Set 2 PC	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	Timescale for Resolution
IDI periodic messages There is no functionality within the IDI to automatically annunciate a "Special Message" (e.g. "Passengers are reminded"), which is typically set on 15 minute timers. This will result in the "Passengers are having to initiate the "Special Message" at regular intervals or informing the passengers via the PA. TPS Appendix A	IDI Configuration does not meet all Contract requirements The IDI should have the ability to display a Special message concurrently with a current message. ITPS Appendix A	Expeditiously and diligently. TPS Appendix A RR has indicated this MD The IDI should have the ability to have a "Change At <station> for <ines>" message that will be rectified by PC Set displays concurrently with an "Approaching <station>" message.</station></ines></station>	Expeditiously and IDI Configuration does not meet all Contract requirements diligently. The IDI should have the ability to scroll and flash as the train approaches the respective station. RR has indicated this MD however this function is currently not available. will be rectified by PC Set TPS Appendix A	Train Inspection Program tool useability can be improved. Familiarise with limitations of tool. E.g. can load one day of data at a time TPS Appendix N	FRACAS 1817 Downloading the Event Recorder will not apply a digital signature and therefore not be tamper-proof TPS Appendix N	eTIS does not display the version status of Set software TDB.7.4.1	Defect/Issue
Compliant software solution to be re-tested and submission of Test Report with test steps successfully passed	Final IDI Configuration to be agreed on or before PC of Set 4. Any design changes then to be implemented, re-tested and submission of Test Report with test steps successfully passed	Final IDI Configuration to be agreed on or before PC of Set 4. Any design changes then to be implemented, re-tested and submission of Test Report with test steps successfully passed	Final IDI Configuration to be agreed on or before PC of Set 4. Any design changes then to be implemented, re-tested and submission of Test Report with test steps successfully passed.	Demonstration of TIP tool download methodology and use of procedures agreed acceptable by RailCorp PPP Co. must provide TIP tool analysis service within 6 hours on request from RailCorp following operational incident	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed PPP Co. must provide TIP tool analysis service within 6 hours on request from RailCorp following operational incident	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed Within one business day of request from RailCorp, PPP Co to use Linux tools to confirm software version	Rectification Method & relevant Conditions of Acceptance

Item	ō	Rail Ref	RailCorp Determination	RailCorp	Timescale for Resolution	Defect/Issue	Rectification Method & relevant Conditions of Acceptance
37	MD-0247	RR#10489	Minor Defect	RC06501	Expeditiously and diligently.	The ICT system cannot time stamp over a 35 year period, and is therefore non-compliant to the Contract requirements. The train uses a computer operating system which is an industry standard (like MS Windows); this operating system has an inherent issue like the YZK issue, which will possibly take effect in the year 2036, 2038 and 2040.	PPP Co to confirm action plan to ensure this issue remains on PPP Co. and RailCorp Hazard Log or Long Term Action Plan for future resolution Any costs associated with this resolution are to be borne by PPP Co.
38	MD-0261	RR#10685	Minor Defect	RC06501	Expeditiously and diligently. RR has previously indicated this MD would be rectified by 31/3/11. This date has now lapsed and the work remains incomplete, RR have indicated this MD will now be rectified by Set 2 PC	Expeditiously and diligently. RR has previously indicated this MD would be rectified by 31/3/11. A Passenger-fo-Crew call shall initially only be heard in the active Guard's Workstation. The fourth active Passenger Emergency Intercom call will be escalated directly to the driver cab. Compliant software solution to be re-tested and submission of Test Report with test steps successfully passed steps successfully passed steps successfully passed. Steps successfully passed steps successfully passed steps successfully passed and the work remains incomplete. RR have indicated this MD will now be rectified by Set 2.	Compliant software solution to be re-tested and submission of Test Report with steps successfully passed
39	MD-0302	RR#11901	Quality Improvement Issue	RC07596	N/A	TDC09 Cab Transverse Door not to tolerance on width The walkway from the saloon to the cab is 4mm narrower than specification at waist height, but ok (700mm wide) at head and foot levels.	PPP Co to provide RailCorp within 3 months of Set 1 PC updated Manufacturing instructions to manage this quality non-conformance. PPP Co is not required to complete any physical re-work to Set 1 The requirement to rectify this Defect before Practical Completion will not be waived for Set 2 and subsequent Sets.
40	MD-0306	RR#11688	Minor Defect	RC07207	Expeditiously and in the event that diligently. reported as 'CON RR has indicated this MD TPS Appendix K will be rectified prior to Set 2 PC	one of the two redundant links to FDS or CSS fails, FDS or CSS will be always event when the remaining redundant link is working	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed PPP Co On Train Technician to check the status of FDS and CSS redundant links to ensure that both are operating
4	MD-0309	RR#12056	Minor Defect.	RC07596	Expeditiously and diligently. RR has indicated this MD will be rectified by Set 3	Unable to retrieve eTIS tog Events and Event Fault Context Data This data is retrieved using the portable service tool. TPS Appendix K	Compliant solution to be re-tested (Resubmit CTR01240 Section 5.1) and submission of Test Reports with test steps successfully passed
42	MD-0312	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. Recorded RMM no horn/bell ever no h	data double expected size: horn/bell data are constantly recorded even when its exist	Compliant software solution to be re-tested and submission of Test Reports with fest steps successfully passed

Item	ID	Reliance Rail Ref	RailCorp Determination	RailCorp Ref	Timescale for Resolution	Defect/Issue	Rectification Method & relevant Conditions of Acceptance
43	MD-0320	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	FRACAS 1355 Crew not able to manually edit the departure times on the eTIS DVA control page TDB 7.4.3	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
44	MD-0321	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC		Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed PPP Co to check that all subsystems are connected as part of their Train Certification process.
45	MD-0323	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	Event recorder stores incorrect value of HVAC Net Energy consumption TPS Appendix N Item 11 & 12	Compliant software solution to be re-lested and submission of Test Reports with test steps successfully passed
46	MD-0325	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	FRACAS 1597 If crew play a DVA special message it will cancel the standard "Depart / Next Station" messages TPS 11.11.3	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
47	MD-0337	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	Pictogram on Doors status screen D550 still shows Help point icon after clearing PEI call TPS Appendix K	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
48	MD-0338	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	eTIS maintenance screens for Access maintenance M810 & Brakes maintenance M820 have no scaling factors applied to numerical values TPS Appendix M Item 23	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
49	MD-0339	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	eTIS Climate Control Car Status screen 540 shows rounded values for temperature rather than tenths of degrees TPS Appendix M Item 23	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
50	MD-0341	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	EAPS fuse status is inverted on High Tension Status electronic Train Information System screen 575-1 TPS Appendix K Items 2.1 & 2.2	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed PPP Co to check that EAPS fuse state is correct as part of pre-release process.

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Item	ID	Reliance Rail Ref	RailCorp Determination	RailCorp Ref	Timescale for Resolution	Defect/Issue	Rectification Method & relevant Conditions of Acceptance
52	MD-0362	RR#11698	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 7 PC	The lighting provided at the passenger doors does not meet the train specification requirement (illumination criteria of 150 lux) in the corners and far edge of lit radius of the door portals (i.e. that is to say that the requirement states that a 1m Semi Circular array should be illuminated by the lighting). TPS.9.10.7 Lighting Illumination.1 Levels of illumination for the lighting shall comply with lux measurement according to UIC Code 555 clause 4.	
53	MD-0366	RR#11901	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified by Set 1 PC + 6 months	Stack adjuster test failure The stack adjusters in the compact brake calipers inherently have a smaller adjustment stroke compared with a conventional caliper.	PPP Co to provide RailCorp with updated Maintenance documentation (CFS02850) to reflect the requirement to make 4 brake applications rather than several applications. (CFS02850 item 6.3.5)
55	MD-0379	RR#11899	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified by PC of Set 7	Crew Body Side Door Type Test failures Crew Body Side Door Type Test failures reported as per CTR00959-001Rev Cab window raising force 66N versus 50N required. It will require the crew to exert higher force to close the window. TPS 6.6.2	Trial of the window to be undertaken up to PC Train Set 7. This Defect will be closed if no complaints are received from Train Crew with respect to this issue during the trial.
56	MD-0384	RR#11698	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified by PC of Set 7	When measured from inside the crew cabin, both the Town and Country Horn exceed the 92 dB(A) maximum noise level required by the TPS. Town Horn is currently recorded in the test report as 95dB(A). Country Horn is currently recorded in the test report (CTR00813-001) as 102dB(A). This may impact on the noise exposure levels that the train crew experience. TPS 11.9.1	PPP Co will conduct further investigations into noise intrusion mechanism(s) and how the noise levels can be improved (reduced) to achieve compliance. RailCorp has the discretion to determine whether compliance for noise within crew cab area is to be delivered by either: - a design change; or - a RFTA to amend the Train Performance Specification.
58	MD-0388	RR#11698	Minor Defect	RC07521	will be rectified by	With the train in Full Auxiliary State (air compressors ON and HVAC running in Cool 2), the following wayside noise failures were reported below. a) The majority of these cases are a failure by 1 decibel, however, the worst case measurement under full auxiliary state was found to be 57 dB(A) at 30m out from the centre of the train at the Trailer Car. The TPS requirement is 53 dB(A). b) Tonal noise was assessed using the criteria in RSU150 clause 2.5, which gives limits on the delta between adjacent bands in the 1/3 octave spectrum. While the limits were met in most conditions, there were some instances where tonality was present. The limits required by TPS are from RSU 150. TPS.3.2.1	
59	MD-0397	RR#11698	Minor Defect	RC07207		The crew cab bell, used to communicate between the driver and guard, exceeds the 85db(A) noise limit by 5-8db(A), as required in the train specification It is also noted that TPS 11.6.4 includes a requirement that the "bell shall sound like the bells fitted to the majority of the CityRail Fleet". As noted above, the PPP Waratah uses the same bell as the Millennium to address this requirement.	A trial of the crew cab bell is undertaken up to PC Set 7. This Defect will be closed if no complaints are received from Train Crew with respect to this issue during the trial.

Item	ō	Reliance Rail Ref	RailCorp Determination	RailCorp Ref	Timescale for Resolution	Defect/Issue	Rectification Method & relevant Conditions of Acceptance
60	MD-0474	RR#11901	Minor Defect	RC07207	Expeditiously and lin the event that display 'eTIS una RR has indicated this MD FRACAS DB341 will be rectified by PC of Set 3	In the event that an electronic Train Information System screen is disconnected, it will not display 'eTIS unavailable' message. FRACAS DB341	Compliant software solution (CTI00878 test step 11) to be re-tested and submission of Test Reports with test steps successfully passed
					Set 3		
61	MD-0478	RR#11688	Minor Defect	RC07207	Expeditiously and diligently.	eTIS Driver and Guard displays do not provide sign off button on navigation bar	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
					RR has indicated this MD will be rectified prior to Set 2 PC	IPS Appendix Millerii 4	
62	MD-0480	RR#11688	Minor Defect	RC07207	Expeditiously and diligently.	FRACAS 713 Compilant software solution is lowered and displays the symbol for unknown state (yellow pan raised) when the pantograph steps successfully passed	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
					RR has indicated this MD will be rectified prior to Set 2 PC	TPS Appendix K Item 2.45	
63	MD-0484	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	FRACAS 1514 If eTIS loses signal from on-board surveillance device (Digital Video recorder or internal / external cameras) then the indication "CHECK" may not be displayed TPS Appendix K Items 2.1 & 2.2	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
64	MD-0487	RR#12044	Minor Defect	RC07521	Expeditiously and diligently,	eTIS does not allow sort by level by deselecting either sort by subsystem, or sort by time in the alerts screen (200).	Compliant solution to be re-tested (CTI00875 step 11 / CTI00879 step 38) and submission of Test Reports with test steps successfully passed
					RR has indicated this MD will be rectified by PC of Set 2	RR has indicated this MD TPS Appendix M Section 6 will be rectified by PC of Set 2	
65	MD-0489	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	In the event of an attempted activation of a second workstation, the eTIS does not display an alert on the active Driver's or Guard's workstation of the attempted activation of another workstation. FRACAS 1860 TPS 7.2.3	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
66	MD-0493	RR#11688	Minor Defect	RC07207	Expeditiously and diligently.	The electronic Train Information System triggers the "Journey" announcement on approach to the Interchange station and not on departure from the interchange station	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
					RR has indicated this MD FRACAS 1931 will be rectified prior to TPS Appendix	FRACAS 1931 TPS Appendix A	

Item	ID	Reliance Rail Ref	RailCorp Determination	RailCorp Ref	Timescale for Resolution	Defect/Issue	Rectification Method & relevant Conditions of Acceptance
67	MD-0513	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	FRACAS 1848 Air Compressor displays status correctly on Main Status screen but incorrectly ("COMMS") on the Air Compressor Status Screen TPS Appendix K Item 2.48	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
68	MD-0526	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC		Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
69	MD-0529	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC		Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed PPP Co On Train Technician to be supplied and check status until Defect rectified
70	MD-0533	RR#11688	Minor Defect	RC07596	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	FRACAS 2128 "Stabling Warning - Park Brake not applied" alert is not displayed	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed PPP Co On Train Technician to be supplied and check status until Defect rectified
71	MD-0540	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	UTC is recorded in electronic Train Information System Event Recorder, but UTC offset is recorded incorrectly in Event Recorder FRACAS 1852 TPS Appendix N	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
72	MD-0543	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	Event Recorder does not record guard sign on code. Event Recorder records driver sign on in one car only, and does not sign the driver off FRACAS 1861 TPS Appendix N Section 9	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
73	MD-0546	RR#11698	Treat as if Minor Defect	RC07521	Set 7 PC	CMR clause 4.7.2 states " PPP Co must submit a full set of as-built Design Documentation that describes fully, and is consistent with, the 'As Built' Configuration". CMR Attachment 1 states that this is required "Before Practical Completion of Set 1".	To mitigate this defect PPP Co must (free of charge) provide RailCorp with reasonable access to a set of as-built Design Documentation

Submission of revised Test Report (CTR00864) to demonstrate relevant test steps have been successfully passed	It has not been possible to control a climate chamber at high ambient temperature (41 - 46 degrees C) such that verification of high ambient performance can be correctly demonstrated. The interplay of heat being rejected by the air conditioner and the chamber's heat control has not allowed stable temperatures of 45 degrees C to be held consistently throughout the chamber. TDB 9.25	31/08/2011	RC07207	Treat as if Minor Defect	RR#11694	MD-0557	80
PPP Co to provide RailCorp prior to PC of Set 2 updated Manufacturing Instructions to manage this quality non-conformance. The requirement to rectify this Defect before Practical Completion will not be waived for Set 2 and subsequent Sets.	in 2 seated locations out of 30 in the TDC saloon, the velocity of air delivered exceeds the specified maximum of 0.4 m/s (in 1 location, by 0.3 m/s, and the other by 0.04 m/s). This provides a marginal non-compliance against passenger comfort in 1 seat location. TPS 9.25	NIA	RC07596	Quality Improvement Issue	RR#11765	MD-0555	79
Compliant solution to be re-tested (CTI00858) and submission of Test Reports with test steps successfully passed	Expeditiously and diligentily. The unit under test experienced damper leakage which was traced to poor equipment set up. The unit under test experienced damper leakage which was traced to poor equipment set up. The unit under test experienced damper leakage which was traced to poor equipment set up. The unit under test experienced damper leakage which was traced to poor equipment set up. The unit under test experienced damper leakage which was traced to poor equipment set up. The unit under test experienced damper leakage which was traced to poor equipment set up. The unit under test experienced damper leakage which was traced to poor equipment set up. The unit under test experienced damper leakage which was traced to poor equipment set up. The unit under test experienced damper leakage which was traced to poor equipment set up. The unit under test experienced damper leakage which was traced to poor equipment set up. The unit under test experienced damper leakage which was traced to poor equipment set up. The unit under test experienced damper leakage which was traced to poor equipment set up. The unit under test experienced damper leakage which was traced to poor equipment set up. The unit under test experienced damper leakage which was traced to poor equipment set up. The unit under test experienced damper leakage which was traced to poor equipment set up. The unit under test experienced damper leakage which was traced to poor equipment set up. The unit under test experienced damper leakage which was traced to poor equipment set up. The unit under test experienced damper leakage which was traced to poor equipment set up. The unit under test experienced damper leakage which was traced to poor equipment set up. The unit under test experienced damper leakage which was traced to poor equipment set up. The unit under test experienced damper leakage which was traced to poor equipment set up. The unit under test experienced damper leakage which was traced to poor equipment set up. The unit under test experienced da	Expeditiously and diligently. RR has indicated this MD will be rectified by Set 2	RC07596	Minor Defect	RR#12044	MD-0554	78
Implement compliant solution and provide lest Report (C.1012/12) to demonstrate relevant test steps have successfully passed PPP Co acknowledges that Vandalism which is attributable to this Defect is not a Reimbursable Damage Event under the Project Contract. Accordingly, PPP Co will bear the cost of repairing such Vandalism and ensure the damage is rectified within two Availability periods of occurring.	the product. TPS 6.11.3 PPP Co acknowledges that Vandalism which is attributable to this Defect is not a Reimbursable Damage Event under the Project Contract. Accordingly, PPP Co with the cost of repairing such Vandalism and ensure the damage is rectified within two Availability periods of occurring.	RR has indicated this MD TPS 6.11.3 will be rectified prior to Set 7 PC	KCU/996	Minor Detect	X X X 3 3 3 5 5 5 5 5 5 5 5 5 5 5 5 5 5	MD-0550	ò
PPP Co to implement an Engineering Instruction to tidy-up the seal and improve on the cosmetic appearance on Set 1 (Train A03) prior to PC. Furthermore, PPP Co has raised the Defect as an NCR and this issue will be addressed on Sets in manufacture by the PC of Set 7.	This non-conformance is related to poor workmanship and installation of the rubber seal on the glass centre partition. Contract clause 14.4	Expeditiously and diligently.	RC07207	Minor Defect	RR#11698	MD-0549	75
PPP Co agree that an in service trial is conducted on the first six (6) Sets to determine if there are any issues. If no issues are identified then this Minor Defect will be closed.	External Dynamic Noise Level Exceeds 82 dBA in full friction breaking mode. FRACAS F00634 logged against CTR00815-001. The first full service friction only brake stop passed this requirement. However, the 2nd and 3rd stops failed the maximum over-all wayside noise level and the tonality requirement due to brake squeal. When conducting a number of consecutive friction brake stops the friction element temperature rises above normal levels and this induces brake squeal. TPS 3.2.1	Expeditiously and diligently	RC07521	Minor Defect	RR#11698	MD-0548	74
Rectification Method & relevant Conditions of Acceptance	Defect/Issue	Timescale for Resolution	RailCorp Ref	RailCorp Determination	Reliance Rail Ref	īD	Item

Item	ID	Reliance Rail Ref	RailCorp Determination	RailCorp Ref	Timescale for Resolution	Defect/Issue	Rectification Method & relevant Conditions of Acceptance
81	MD-0560	RR#11698	Minor Defect	RC07521	Expeditiously and diligently. RR has indicated this MD will be rectified by 31/8/11	The traction cut in/cut out software function is not working as anticipated, as the maintainer cannot use cut in/cut out while the train is stationary. This will impact on the maintainer's ability to cut in/cut out traction system should a fault occur on the respective system. This defect has no impact on the driver functionality as their access to cutting in/out of traction motors is restricted (feature is for maintainers only). The absence of the feature will not cause or risk damage to equipment, or cause a disruption to operators. The Hitachi equipment is self-protecting in this regard. FRACAS 530 TPS 10.2.3	PPP Co to implement revised TIM software, then submission of revised Test Report (CTR00934) to demonstrate relevant test steps have been successfully passed
82	MD-0561	RR#11698	Minor Defect	RC07596	Expeditiously and diligently. RR has indicated this MD will be rectified by 31/8/11	Traction Inverter Module does not require the reset in all of the anticipated traction powering inhibited situations. The contract requires a first level reset to be performed by the driver by moving the traction control to the off position and then re-applying power. However, the first lever reset is not provided for all scenarios as specified. When the traction is no longer inhibited, the TIM regains the powering operation automatically. Whilst safety systems function correctly and as expected, recovery from the safety action does not require Driver action as would be expected. FRACAS 669 TPS 10.2.20	PPP Co to implement revised TIM software, then submission of revised Test Report (CTR00934) to demonstrate relevant test steps have been successfully passed PPP Co On Train Technician to be supplied and provide necessary support until Defect rectified
83	MD-0563	RR#11698	Quality Improvement issue	RC07596	N/A	The actual crew transverse door window bottom edge in car 6403 is at 1107 mm above floor. The nominated value is 1100 mm+/-5 mm. DEDIR believe that exceeding the tolerance by 2mm will have no significant impact on the use of the window. FRACAS 674 TPS 6.7.5.3	PPP Co to provide RailCorp prior to PC of Set 2 updated Manufacturing Instructions to manage this quality non-conformance The requirement to rectify this Defect before Practical Completion will not be waived for Set 2 and subsequent Sets.
84	MD-0564	RR#11899	Quality Improvement Issue	RC07596	N/A	Door Clear Opening Distance Less Than Required F00689 Door Clear Opening Distance Less Than Required Door dimensions of clear opening distance does not meet minimum opening & clearance height. Refer to test step 7.1c (once inside the Crew compartment the head height = 1945mm) in Appendix A, CTR00959-001RevA. FRACAS 689 TPS 6.7.4.1	PPP Co to provide RailCorp with updated Manufacturing Instructions prior to PC of Set 7 to manage this quality non-conformance. The requirement to rectify this Defect before Practical Completion will not be waived for Set 7 and subsequent Sets.
85	MD-0567	RR#11694 RR#11901	Minor Defect	RC07625	Expeditiously and diligently. RR has indicated this MD will be rectified by 31/8/11	TIM unexpected powering operation Hitachi's software is designed such that a single point failure of the Emergency Traction train line to TIM might initiate a higher than requested power demand when the master controller is moved from a "coast" to "power" position. During test running, DEDIR have identified design shortfalls. Circuit improvements (modifications) have been identified to remove the identified single point failures. Modifications to the traction software, relay logic and to the combined power/brake controller inputs from subcontractors are required.	Implement compliant solution and provide Test Report to demonstrate relevant test steps have successfully passed

0575 RR#11694 Minor Defect RC07207 0576 RR#11694 Minor Defect RC07207	Minor Defect Minor Defect Minor Defect
red abruptly, the shutter at the crew transverse distops in the sliding frame. The design requires in stops in the sliding frame. The design requires in stops in the sliding frame trap identified at lower edge we floor). The scenario for this is considered very the floor in the scenario for this feature would be the visual appearance of this feature would be	red abruptly, the shutter at the crew transverse distops in the sliding frame. The design requires in e is a potential finger trap identified at lower edge we floor). The scenario for this is considered verthere the grab rail passes through the ceiling, the visual appearance of this feature would be a considered well appearance of the cab back wall), the consistency that can only be done after opening rage allerting the crew, the local buzzer warning,
PPP Co acknowledges that Vandalism which is attributable to this D Reimbursable Damage Event under the Project Contract. According the cost of repairing such Vandalism and ensure the damage is recti Availability periods of occurring. PPP Co to implement a design change prior to PC of Train A03 to m x. 200- trap PPP Co to implement a design change prior to PC of Train A03 to m RailCorp Reimbursable Damage Event. Accordingly, PPP Co will bear the co Vandalism.	PPP Co acknowledges that Vandalism which is attributable to this Defect is not a Reimbursable Damage Event under the Project Confract. Accordingly, PPP Co will bear the cost of repairing such Vandalism and ensure the damage is rectified within two Availability periods of occurring. PPP Co to implement a design change prior to PC of Train A03 to mitigate the finger x. 200- trap PPP Co to implement a design change prior to PC of Train A03 to mitigate the finger krailCorp RailCorp PPP Co acknowledges that Vandalism which is attributable to this Defect is not a Reimbursable Damage Event. Accordingly, PPP Co will bear the cost of repairing such Vandalism. Compliant solution to be developed, implemented by PPP Co and verified by RailCorp PPP Co acknowledges that Vandalism which is attributable to this Defect is not a Reimbursable Damage Event. Accordingly, PPP Co will bear the cost of repairing such Vandalism. Vandalism.
Minor Defect RC07207 Expeditiously and diligently. RR has indicated this MD Note: There is a potential finger trap identified at lower edge will be rectified prior to Set 1 PC + 3 months Minor Defect RC07207 Expeditiously and diligently. RR has indicated this MD Note: There is a potential finger trap identified at lower edge will be rectified prior to Set 1 PC + 3 months The grommet where the grab rail passes through the ceiling such an act, the visual appearance of this feature would be a Set 1 PC + 6 months	Minor Defect RC07207 Expeditiously and diligently. RR has indicated this MD Note: There is a potential finger trap identified at lower edge will be rectified prior to Set 1 PC + 3 months Expeditiously and diligently. RR has indicated this MD Note: There is a potential finger trap identified at lower edge will be rectified prior to Set 1 PC + 3 months The grommet where the grab rail passes through the ceiling such an act, the visual appearance of this feature would be set 1 PC + 6 months RR has indicated this MD TPS.6.11.3 Will be rectified by TPS.6.11.3
Minor Defect RC07207 Expeditiously and diligently. Expeditiously and such an act, the visual appearance of this feature would be degraded. RR has indicated this MD TPS.6.11.3 will be rectified prior to Set 1 PC + 6 months	Minor Defect RC07207 Expeditiously and such an act, the visual appearance of this feature would be a such an act, the visual appearance of this feature would be a will be rectified prior to set 1 PC + 6 months Minor Defect RC07207 Expeditiously and diligently. Expeditiously and or per Set (Saloon side of the cab back wall), the be ripped from its hinge. This can only be done after opening CCTV coverage alerting the crew, the local buzzer warning. TPS.6.11.3
	RR#11694 Minor Defect RC07207 Expeditiously and diligently. Expeditiously and be ripped from its hinge. This can only be done after opening the cover triggering the alarm and CCTV coverage alerting the crew, the local buzzer warning, and by a wilful act of vandalism. RR has indicated this MD will be rectified by 31/8/11 31/8/11

Item	ID	Reliance Rail Ref	RailCorp Determination	RailCorp Ref	Timescale for Resolution	Defect/Issue	Rectification Method & relevant Conditions of Acceptance
97	MD-0581	RR#12056	Minor Defect	RC07596		Temperature rise of OHL contact wire PPP Co has not been able to demonstrate the specified performance requirements with respect to temperature rise of the OHL contact wire under worst case current draw (single pantograph on a 4 car consist) and climatic conditions. TPS.8.2.2	Compliant solution to be re-tested (CTI00984) and submission of Test Reports with test steps successfully passed
98	MD-0582	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	PEI indication on DDU/GDU displays wrong location of caller from one cab TPS Appendix K Items 2.1 & 2.2	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
99	MD-0583	RR#11688	Minor Defect	RC07596	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	FRACAS 2090 No pre-warning alert for emergency braking radio escalation that occurs 30 seconds after train stops TPS 11.12.1.1	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
100	MD-0584	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	FRACAS 2140 Commercial Radio does not mute on eTIS alert TPS 11.14	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
101	MD-0585	RR#11688	Minor Defect	RC07521	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	FRACAS 2089 Passenger Information System does not automatically update passengers (screen 304) if a station is skipped or passed until arrival at the next station TPS Appendix M Item 8	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
102	MD-0586	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	FRACAS 2146 Rollback detected tile not displayed on DDU TPS 10.1.6	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed PPP Co On-Train Technician to assist the driver resetting the train (demanding an equal or higher setting of brakes) as required.
103	MD-0587	RR#11688	Minor Defect	RC07596	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	FRACAS 2147 "SLIP/SLIDE" detected wrongly displayed on DDU as "CÓMMS" TPS Appendix K	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed

Item	ID	Reliance Rail Ref	RailCorp Determination	RailCorp Ref	Timescale for Resolution	Defect/Issue	Rectification Method & relevant Conditions of Acceptance
104	MD-0588	RR#11688	Minor Defect	RC07625	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	FRACAS 2157/2158 The Automatic Train Certificate information cannot be relied upon TPS Appendix K Item 2.4	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed Until this issue is rectified PPP Co will complete a manual signed Train Certificate to confirm Minimum Standards compliance that will be handed to Crew
105	MD-0589	RR#11688	Minor Defect	RC07625		FRACAS 2141 Event Recorder fail will not be displayed on the DDU/GDU TPS 7.6	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed PPP Co On-Train Technician to check both Event Recorders are working at the end of each journey and the Set will be removed from service if either Event Recorder has failed
106	MD-0590	RR#11688	Minor Defect	RC07207	diligently.	FRACAS 1982 If Guard changes skipped stop to a stop during a run then the Driver will not see the change of next three stops on his eTIS display	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
107	MD-0591	RR#11688	Minor Defect	RC07596		FRACAS 1618 eTIS screen will occasionally not respond to touch TPS 7.4	PPP Co commits to and is already implementing actions to improve / reduce this issue along with the glare related phenomenon (MD-0571). Action plan to be implemented as per RR#12016 dated 20/5/11 Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
108	MD-0592	RR#11688	Minor Defect	RC07207	diligently		Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed PPP Co On Train Technician to be supplied and check status until Defect rectified
109	MD-0593	RR#11688	Minor Defect	RC07207	diligently.	FRACAS 1875 In the event that both Passenger Information System Managers (PISM) fail the DVA failed alert will not be displayed on the eTIS screen TPS Appendix K	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed PPP Co On Train Technician to be supplied and check status until Defect rectified
110	MD-0595	RR#11688	Minor Defect	RC07521		FRACAS 2175 Set Borne Gateway (SBG) does not provide necessary security from malicious persons TPS.3.5.6	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed

Item	ō	Reliance Rail Ref	RailCorp Determination	Ref	Resolution	Defect/Issue	Necuncation method of relevant conditions of Acceptance
Ξ	MD-0596	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	FRACAS 1947 If eTIS loses signal from on-board communications device (IDI, PEI, PA) then the indication "CHECK" may not be displayed TPS Appendix K	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
112	MD-0597	RR#11688	Minor Defect	RC07207	Expeditiously and diligently.	FRACAS 2002 In the event of an eTIS communications failure it is possible to sign on to both cabs	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
					RR has indicated this MD will be rectified prior to Set 2 PC	RR has indicated this MD TPS Appendix L and Appendix M will be rectified prior to Set 2 PC	
113	MD-0598	RR#11688	Minor Defect	RC07207	Expeditiously and diligently.	FRACAS 1867 The "Alerts List" will be sorted chronologically (i.e. by time and not by level) by default. This means instead of all I aveil 1's presented first, then I aveil 2's the default sortion will be latest	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
					RR has indicated this MD will be rectified prior to Set 2 PC		PPP Co On Train Technician to be supplied and check status until Defect rectified
114	MD-0599	RR#11688	Minor Defect	RC07207	Expeditiously and diligently.	FRACAS 1927 Commencement & Journey announcements are visible (on IDI) but not audible (DVA)	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
					RR has indicated this MD TPS Appendix A will be rectified prior to Set 2 PC	TPS Appendix A	PPP Co On Train Technician to be supplied and check status until Defect rectified
115	MD-0600	RR#11688	Minor Defect	RC07207	Expeditiously and diligently.	eTIS provides control of contactors at each end of the Set, but not between cars 4 and 5 TPS 9.6.1	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
					RR has indicated this MD will be rectified prior to Set 2 PC		
116	MD-0601	RR#11688	Minor Defect	RC07207	Expeditiously and diligently.	In the event that connection between eTIS and both CSS DVRs is lost, then eTIS indicates comms' for FDS on the Main Status screen	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
					RR has indicated this MD FRACAS 1985 will be rectified prior to TPS Appendix	FRACAS 1985 TPS Appendix K Illems 2.1 & 2.2	PPP Co On Train Technician to monitor status of both eTIS to CSS DVRs and to advise Crew.
						O photos is an incident	PPP Co Maintainers Brief - As part of pre-release, Maintainer to check that FDS and CSS are fully operational (both links)
117	MD-0602	RR#11688	Minor Defect	RC07207	Expeditiously and diligently.	In the event that the Guard wishes to sign on to a Drivers Display Unit, the Guard can only sign in on the right Driver Display Unit. and not the left Driver Display Unit	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
					RR has indicated this MD TPS 7.4 will be rectified prior to	TPS 7.4	

Item	ID	Reliance Rail Ref	RailCorp Determination	RailCorp Ref	Timescale for Resolution	Defect/Issue	Rectification Method & relevant Conditions of Acceptance
118	MD-0603	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	Crew Chime type 2 is not played on the last station of the run FRACAS 2043 TPS 11.11.3	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
119	MD-0604	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	Crew chime 1 is activated by eTIS in AUTO mode but not activated in MANUAL mode FRACAS 2042 TPS 11.11.3	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
120	MD-0605	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	Subsystem alerts on electronic Train Information System alert screen (200) are separated by role (Guard / Driver) FRACAS 1999 TPS Appendix M section 6	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
121	MD-0606	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	Train Totals on electronic Train Information System System Status (900) electrical energy values are scaled by 1000 FRACAS 1873 TPS Appendix K Items 2.1 & 2.2	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
122	MD-0607	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	Maintainer electronic Train Information System Input / Output screens will not report 'COMMS' is a rack is disconnected FRACAS 1865 TPS Appendix K	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
123	MD-0608	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	eTIS does not record maintenance flags for all instances of devices (cameras, and DVRs) FRACAS 1066 TPS Appendix K	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
124	MD-0609	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	If driver signs in on the higher car stock number, the controls to cut out Static Inverter are swapped from one end of the Set to the other on the maintainer screen (M870) shows "solated" when "OK" FRACAS 2144 TPS Appendix M Item 40	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed

Item	ID	Reliance Rail Ref	RailCorp Determination	RailCorp Ref	Timescale for Resolution	Defect/Issue	Rectification Method & relevant Conditions of Acceptance
125	MD-0610	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	When Crew sign out, the eTIS Display Unit screensaver will not blank the screen FRACAS 2143 TPS Appendix K	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
126	MD-0611	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	eTIS intermittently displays a green image in the alert bar for short periods of time FRACAS 2092 TPS Appendix M	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
127	MD-0612	RR#12056	Minor Defect	RC07521	Expeditiously and diligently. RR has indicated this MD will be rectified by Set 2 PC	In the event that the horn circuit breaker trips, electronic Train Information System displays 'passenger lighting' in addition to the alert 'horn circuit breaker tripped'. In the event that the lighting circuit breaker trips, electronic Train Information System does not display a passenger lighting alert FRACAS 2093 TPS Appendix K	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed PPP Co On Train Technician to be supplied and check status until Defect rectified
128	MD-0613	RR#11901	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified by PC of Set 3	Time displayed on CCTV monitors is UTC (not local) FRACAS 2124 TDB 11.10.3	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
129	MD-0614	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC		Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
130	MD-0615	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC		Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
131	MD-0616	RR#11688	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC	If Cab Audio volume button is touched it oscillates 1 or 2 indications above setting FRACAS 2152 TPS 11.5.4	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed

Item	ID	Reliance Rail Ref	RailCorp Determination	RailCorp Ref	Timescale for Resolution	Defect/Issue	Rectification Method & relevant Conditions of Acceptance
132	MD-0617	RR#11688	Minor Defect	RC07207	diligently.	eTIS does not record a number of CSS maintenance flags for maintainer assessment FRACAS 2045 TPS Appendix K	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
133	MD-0618	RR#11688	Minor Defect	RC07596	diligently. RR has indicated this MD	In the event that there is smoke external to the Set, eTIS will provide a smoke alert via the Fire Detection System, and via an alert on eTIS, however there will be no external smoke indication on screen 101 status area. FRACAS 2077 TPS Appendix M Item 4	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
134	MD-0619	RR#11688	Minor Defect	RC07207			Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
135	MD-0620	RR#11688	Minor Defect	RC07207	diligently.	eTIS does not show correct values for HVAC energy to the maintainer FRACAS 2088 TPS 5.2.2	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
136	MD-0621	RR#11688	Minor Defect	RC07207	diligently.	eTIS does not display the correct Electrical Auxiliary energy totals to the maintainer on M900 FRACAS 2123 TPS 5.2.2	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
137	MD-0622	RR#11901	Minor Defect	RC07207	diligently		Compliant software solution to be re-tested (Retest:steps: 113, 118, 120 of CTI00872D, steps: 17 of CTI00877C, steps: 20, 46, 47, 50, 76, 78 of of CTI00878F steps: 12 of CTI01085C steps: 8 of CTI01086E) and submission of Test Reports with test steps successfully passed
138	MD-0623	RR#11688	Minor Defect	RC07596	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC		Successful SIE with CTIP (excluding defects attributable to CTIP) Compliant software solution to be re-tested and submission of Test Reports (CTR01210, CTR01225 & CTR01250) with test steps successfully passed PPP Co agree to supply RailCorp with CCTV, Event Recorder and Logged Event data within the timeframe reasonably requested by RailCorp, at no cost to RailCorp

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Item	ID	Reliance Rail Ref	RailCorp Determination	RailCorp Ref	Timescale for Resolution	Defect/Issue	Rectification Method & relevant Conditions of Acceptance
139	MD-0625	RR#11765	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC		Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
140	MD-0626	RR#11899	Treat as if Minor Defect	RC07596	Set 7 PC	External EDR not available until T2 Timer elapses When the PBSD internal EDR is overridden by Train Crew, the external PBSD EDRs are also unavailable until T2 (timer, which is configurable) is cancelled or times out. This is a non-conformance with the TPS. Appendix AA which requires external EDR not to be affected by the override feature.	Options Analysis to propose the most suitable functional solution shall be submitted by PPP Co and achieved NR status by RailCorp by August 2011 If required by the Options Analysis a compliant solution to be implemented, re-tested and submission of Test Reports with test steps successfully passed
141	MD-0627	RR#11899	Minor Defect	RC07596		Circumvention of EDR Override While a piece of metal is placed over the proximity sensor for the PBSD EDR cover, it is not possible to override the EDR because the EDR controller thinks that the cover is closed. This is a non-conformance with TPS.6.7.2.3 Door Emergency Operation.3-RFTA00022-00198 namely "EDR will require the removal of a tamper proof sealing device". This defect means there is a small window of opportunity for someone to tamper with the EDR cover proximity switch preventing override. In the unlikely event of this occuring, this would mean that the guard would not be able to override once the sealing device has been tampered with.	Options Analysis to assess requirements for potential design improvements to achieve compliance shall be submitted by PPP Co and achieved NR status by RailCorp by July 2011 If required by the Options Analysis a compliant solution to be implemented, re-tested and submission of Test Reports with test steps successfully passed
142	MD-0628	RR#12044	Minor Defect	RC07521		ICD Stage 1 and 2 Alarms When an Intercar door is isolated (e.g. due to a car being nightsafed, or due to keyed isolation) EDR cover open and activation will not be alerted to guard. Crew may not be alerted to passenger accessing nightsafed/isolated car. This is a concern as the car may not be safe for passengers to enter and crew may not be aware of passenger entry via EDR. FRACAS DB1030, 1032, 1034 & 1035 TPS Appendix AA	Compliant solution to be re-tested and submission of Test Reports with test steps successfully passed Retest of CTi00962 steps 9.1.d, 9.1.e, 9.1.g, 9.2.d, 9.2.e, 9.2.h
143	MD-0629	RR#11899	Minor Defect	RC07596	Expeditiously and diligently. RR has indicated this MD will be rectified by PC of Set 7	Internal EDR inactive when train is in stabled state RailCorp cannot currently change their decision to enable PBSD Stage 2 EDR activation in STABLED state. i.e. Stage 2 activation of the passenger bodyside door internal EDR is always inactive when the train is in the STABLED STATE. This cannot be reconfigured to make Stage 2 activation active when the car is in the STABLED STATE. FRACAS DB1038 TPS.5.4.2 Stabled.4-RFTA00022 states "In Stabledall Set systems shall be inactive except for e) Internal Passenger bodyside door EDRs (unless made inactive through configurable maintenance task as defined in Clause 6.7.2.3.1).	

Item	ID	Reliance Rail Ref	RailCorp Determination	RailCorp Ref	Timescale for Resolution	Defect/Issue	Rectification Method & relevant Conditions of Acceptance
144	MD-0631	RR#11899	Minor Defect	RC07207	diligently RR has indicated this MD will be rectified by PC of Set 3	PEI message "Please wait to be connected" is not audible during stage 1 activation of a PBSD or CTD EDR The PEI message "Please wait to be connected" is not audible during stage 1 activation of a PBSD or CTD EDR at the number 2 end of a TDC only. The PEI microphone is located directly underneath the stage 1 buzzer and the automatic gain control adjusts the volume of the message based on the volume of noise at the microphone. Because the buzzer is so close to the microphone, the volume of the message is reduced. FRACAS DB1018	Compliant solution to be re-tested and submission of Test Reports with test steps successfully passed
145	MD-0632	RR#12044	Minor Defect	RC07521	diligently. RR has indicated this MD	TPS Appendix AA states that a PEI call is not required for ICD EDR Cover Opened. This defect is that PEI call is provided for ICD EDR Cover Opened (in addition to CCTV). FRACAS DB1027 & 1033	RailCorp is prepared to evaluate this issue during Operational Testing of Sets 1-6 on the additional condition that any further work required by RailCorp to make the item compliant with the Contract is completed
146	MD-0633	RR#12065	Minor Defect	RC07596	ditigently.	Some remaining water ingress following tests. Water test to be conducted to confirm re-work is effective.	Successful test in Auburn washplant
147	MD-0634	RR#11765	Minor Defect	RC07596	diligently. RR has indicated this MD will be rectified by PC of Set 2	The reflective levels on top of the drivers desk are such that indirect glare is experienced when the driver is occupying the workstation. This is deemed non-compliant against the glare requirement stated below. The impact of this non-compliance is such that it may present a distraction to the driver when lighting and reflective levels are conducive to glare. It is noted the requirement for glare is subjective as it is not quantified. TPS.7 Train Crew Requirements.2 To prevent any day and night time glare in the Crew working areas all material used in the Crew areas shall be matt finished or glare free. See also MD-0571	PPP Co commits to and is already implementing actions to improve / reduce glare related phenomenon. Action plan to be implemented as per RR#12016 dated 20/5/11 Compliant solution to be re-tested and submission of Test Reports with test steps successfully passed (Retest CTi00799)
148	MD-0635	RR#12065	Treat as if Minor Defect	RC07596		The defect is that the CCTV Visual Display Unit (VDU) is not suitably screened from externally generated light, and as a result will under direct intensive sunlight be 1) unreadable due to washout / glare and 2) unresponsive to touch, believed to be caused by light impinging touch screen on sensors. See also MD-0164 which covers CMR 4.6.5(b) items: *3: Development test of Sunlight on Video Screens *84: Colours / Brightness of Screen Issues will be managed via this Minor Defect rather than through MD-0164 TPS 7.2.5	agreed with RailCorp. Please refer to letter RR#12066 / EDIR# 11052 dated 23/5/11
149	MD-0637	RR#12056	Treat as if Minor Defect	RC07521	CONTRACTOR.	Update to Project Plans (ICT Systems Architecture Management Strategy) The following document is not submitted for PC * ICT Systems Architecture Management Strategy	Submission of ICT Systems Architecture Management Strategy achieving NR status from RailCorp

Item	ō	Reliance Rail Ref	RailCorp Determination	RailCorp Ref	Timescale for Resolution	Defect/Issue	Rectification Method & relevant Conditions of Acceptance
150 N	MD-0639	RR#11899	Minor Defect	RC07596	Expeditiously and diligently.	The Guard will NOT receive a "Fire Detection System Fault" Alert on eTIS	Compliant solution to be re-tested and submission of Test Reports with test steps successfully passed
					RR has indicated this MD will be rectified by PC of Set 2	RR has indicated this MD The Guard will NOT receive a "Fire Detection System Fault" Alert on eTIS and the eTIS Fire will be rectified by PC of Detection status screen (G680-2) will show "OK" (instead of "FAIL") against the affected part of Set 2.	PPP Co On Train Technician to be supplied and check status until Defect rectified
						TPS Appendix K	
151 N	MD-0640	RR#11684	Minor Defect	RC07521	Expeditiously and diligently.	When making a call on the side of the Set with the doors closed (using the External PA Buttons - Compliant software solution to be re-tested and submission of Test Reports with test labelled as "Ext this side button or Ext other side' button) the button and channel are incorrectly steps successfully passed	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
					RR has indicated this MD will be rectified prior to Set 2 PC	FRACAS 1842 TPS 11.5.5	
152 N	MD-0641	RR#11684	Minor Defect	RC07521	Expeditiously and diligently.	When the CSS handset PTT button is released the 'Ext PA', 'Ext this side' or 'Ext other side' indicators remain steady on, falsely indicating the announcement is still in progress	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
					Will be rectified prior to TPS 11.4 Set 2 PC	TPS 11.4	
153 N	MD-0642	RR#11684	Minor Defect	RC07207	Expeditiously and diligently.	If a Maintainer puts a sound source into the CSS TGU via "line input" and at the same time is doing DVA then Int PA calls, the line input plays instead of Int PA.	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
					RR has indicated this MD Function Description: will be rectified prior to The priority order for t Set 2 PC DVA, followed by spa	Function Description: The priority order for the PA system announcements is Guard/ Driver (or remote), followed by DVA, followed by spare line input.	
						FRACAS 2055 TPS 11.5.4	
154	MD-0643	RR#11684	Minor Defect	RC07207	Expeditiously and diligently.	CSS Off-board Video Utility saves / prints one image per second in a sequence (not each image Compliant software solution to be re-tested and submission of Test Reports with test in a sequence).	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
					RR has indicated this MD Function Description will be rectified prior to CSS Off-board Video second).	Utility saves/prints all images in the selected sequence (6 frames per	PPP Co to provide suitable CSS Off-Board Video Utility service free of charge within 24 hours of request from RailCorp
						TPS 11.10.7.7	
155	MD-0644	RR#11684	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD	Expeditiously and CSS commercial radio output is low and distorted. diligently. Function Description: RR has indicated this MD CSS commercial radio maximum output is 80dBA.	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed
					Set 2 PC	FRACAS 2165 TPS 11.14	

Item	ID	Reliance Rail Ref	RailCorp Determination	RailCorp Ref	Timescale for Resolution	Defect/Issue	Rectification Method & relevant Conditions of Acceptance
157	MD-0646	RR#12056	Minor Defect	RC07521	diligently.	Parts not present for CTIP harness. TPS.3.5.6.2 CTIP Antenna.2 states "The PPP Co. shall supply and install antennae, conduits and cabling for the CTIP component of the RailCorp Data Link",	Compliant solution to be re-tested (CTR00796 CN01 CTIP Inspection Development Test) and submission of Test Reports with test steps successfully passed
158	MD-0648	RR#11899	Minor Defect	RC07207		Passenger Bodyside door or an Intercar door is isolated, the local EDR stage 1 alarm is not audible When a Passenger Body Side Door (PBSD) or Inter-Car Door (ICD) is isolated and the EDR cover is opened, the local alarm does not activate. Misuse of the EDR will not be detered by local alarm when PBSD/ICD is isolated. TPS 6.7.2.3.1	Compliant solution to be re-tested (CTI00962 test steps 3.1(ee), 9.1(b), 9.1(f)) and submission of Test Reports with test steps successfully passed
160	MD-0650	RR#11899	Minor Defect	RC07596		Detrainment Ramp step to sleeper level Drawing 057500589 shows under some theoretically possible but unlikely track configurations the step height from the deployed detrainment ramp to the sleeper level is greater than 250mm and would be nominally 266mm so the design is technically non-compliant. TPS 6.7.6.1	RFTA to be processed post PC of Set 1 to resolve the non-compliance. The RFTA would add the top of rail step height of 266mm to the existing requirement.
161	MD-0651	RR#11899	Minor Defect	RC07207		Locker 7B lights not fitted The design/layout of the lighting in Locker 7B has been designed for the ATP equipment, but the Defect arises because these lights have not yet been fitted, nor can the CTR be completed with a PASS result for this locker and CTR. TPS 9.10.7	Compliant solution to be re-tested and submission of Test Reports (CTR01062 test steps 58-60 on TDC Locker 7B) with test steps successfully passed
162	MD-0652	RR#11899	Minor Defect	RC07521	Expeditiously and diligently. RR has indicated this MD will be rectified by PC of Set 3	Backing of decals Some decals have a clear backing when the design requirement is for no backing at all. TPS 6.12	Compliant solution to be re-tested and submission of Test Reports with test steps successfully passed PPP Co acknowledges that Vandalism which is attributable to this Defect is not a Reimbursable Damage Event. Accordingly, PPP Co will bear the cost of repairing such Vandalism. The requirement to rectify this Defect before PC of subsequent Sets will not be waived after Set 2 PC
163	MD-0654	RR#11684	Minor Defect	RC07596	Expeditiously and diligently. RR has indicated this MD will be rectified prior to Set 2 PC		Compliant solution to be re-tested with and submission of Test Reports with test steps successfully passed
164	MD-0656	RR#11901	Minor Defect	RC07521	Expeditiously and diligently. RR has indicated this MD will be rectified by PC of Set 2	Echo heard by Crew when using Train Radio This defect is that on occasions an "echo" has been reported as being heard by crew during a Metronet call. FRACAS 2211 TPS 11.12.1.1	Compliant solution to be re-tested and submission of Test Reports with test steps successfully passed

Item	5	Rail Ref	Determination	Ref	Resolution	Defect/Issue	RECUINCATION METHOD & RELEVANT CONDITIONS OF ACCEPTANCE
170	MD-0664	RR#11901	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified by PC of Set 2	Expeditiously and diligently. This defect is that part of text displayed on External Destination Indicators is obscured by Crew will be rectified by PC of Reference to CTR01269, steps 6, 7, 8, 12, 13, 14. This defect is that part of text displayed on External Destination Indicators is obscured by Crew will be rectified by PC of Reference to CTR01269, steps 6, 7, 8, 12, 13, 14.	PPP Co to undertake a trade off study / options analysis to assess EDI obscuration, and the options to address the partial obscuration. Close out method for this issue to be submitted to RailCorp for approval
171	MD-0665	RR#12044	Treat as if Minor Defect	RC07590	Set 2 PC	External CCTV cameras have been re-aligned to design settings on Set A03 but have not yet re- run CTR01093. TPS.11.10.2.2 External coverage.2 states "The image clarity, angle of view and depth of field shall enable the Guard to monitor the movement of all passengers including children and objects Compliant solution to be re-tested (CTi01093) and submission of Test Reports with test camera lenses shall be selected so that the Guard is provided with a consistent perspective."	Jointly work together to optimise camera angles during initial service. Update design to reflect, Revise CTI01093 to reflect. Compliant solution to be re-tested (CTI01093) and submission of Test Reports wisteps successfully passed
172	MD-0667	RR#12044	Treat as if Minor Defect	RC07521	Set 1 PC + 2 months	e incomplete from CTR01062-001-, equipment lockers, in each case, scorded.	Re-test (CTI01062) and submission of Test Reports with test steps successfully passed
173	MD-0673	RR#12065	Minor Defect	RC07596	Expeditiously and diligently. CTR00912 however the how	had been run and shows that the hearing loops are fit for their intended purpose; e loops are not fully compliant with the performance requirements. ract area affected;	Compliant solution to be re-tested (CTR00912 CN01 Communications and Surveillance Assisted Listening Integration Type Test) and submission of Test Reports with test steps successfully passed
174	MD-0674	RR#11899	Treat as if Minor Defect	RC07521	Earlier of Set 4 PC or Set 1 PC + 3 months	Earlier of Set 4 PC or Set PEI numberplate graffiti resistance 1 PC + 3 months The PEI numberplate is yet to have graffiti resistance and removal evaluated to CTI00697. The numberplate was not in production at the time of testing. TPS 11.4.11	Submission of revised Test Report (CTI00697) to demonstrate relevant test steps have been successfully passed
175	MD-0676	RR#11899	Minor Defect	RC07521	Expeditiously and diligently. RR has indicated this MD will be rectified by PC of Set 7	Expeditiously and HF study on step light switch diligently. A human factors study is not yet conducted on the step light switch revisions required to resolve will be rectified by PC of clashed with the bogie trip cock. Set 7 TPS clause 7	PPP Co to complete a Human Factors study to establish if the current configuration is acceptable long term. In parallel, PPP Co will review design to improve switch orientation if possible. Note however, the current switch orientation is provided due to space constraints. RailCorp has the discretion to determine whether compliance is to be delivered by a design change.

Item	ID	Reliance Rail Ref	RailCorp Determination	RailCorp Ref	Timescale for Resolution	Defect/Issue	Rectification Method & relevant Conditions of Acceptance
176	MD-0677	RR#11965	Minor Defect	RC07596	diligently. RR has indicated this MD	Clarification of CTR00849-001 The test report CTR00849-001A Passenger and Crew Vibration was granted SC status 12/4/11 and may require a revision to clarify some minor aspects of the testing work undertaken and the method of results analysis. DEDIR will submit this report revision post Set 1 PC TPS 6.2.20	Submission of revised Test Report to demonstrate relevant test steps have been successfully passed
177	MD-0678	RR#11965	Minor Defect	RC07521		PEI message "Please wait to be connected" is not audible during stage 1 activation of a PBSD or CTD EDR FRACAS DB1018	Compliant solution to be re-tested and submission of Test Reports with test steps successfully passed
178	MD-0679	RR#12065	Minor Defect	RC07596	diligently.	upon EDR cover open. It is expected that this will occur for subsequent cover openings, however the tone only occurs upon first cover opening.	Compliant solution to be re-tested (CTI00962) and submission of Test Reports with test steps successfully passed
179	MD-0680	RR#12065	Minor Defect	RC07625	diligently. RR has indicated this MD will be rectified by Set 1	ARGE Direktive Test (smoke test) Currently tests with a smoke pen have been performed showing activation of a Stage 1 and 2 alarm. In addition a test with a smoke generating device will be performed after PC TPS 6.10.1	Compliant solution to be re-tested (CTi00772) and submission of Test Reports with test steps successfully passed
180	MD-0681	RR#11901	Minor Defect	RC07596	diligently. RR has indicated this MD will be rectified by PC of	eTIS indicates 'check' for circuit breakers in Lockers on D570 screen when these are correct. This defect is Low Tension Status - Screen D570 (D-G-M) shows 'Check' all of the time for lockers 4, 6 and 8 when the circuit breakers are 'OK'. This is a false failure reporting. FRACAS D8615 TPS Appendix M item 41	Compliant software solution to be re-tested and submission of Test Reports with test steps successfully passed PPP Co On Train Technician to be supplied and check status until Defect rectified
181	MD-0682	RR#12065	Minor Defect	RC07521	diligently.	Event Recorder does not record the command to emergency close CBSD on car 8 Guard side FRACAS DB791 TPS Appendix N	Compliant solution to be re-tested (CTR00876 Test step 34) and submission of Test Reports with test steps successfully passed
182	MD-0683	RR#11901	Minor Defect	RC07521	diligently.	The Event Recorder does not power up in the Event Recorder extraction rack. The defect is that no accessory is yet available to extract data from the Event Recorder when it is removed from the Set. However data may be extracted from the Event Recorder when it is installed on the Set. FRACAS DB1139 TPS Appendix N	Compliant software solution to be re-tested (CTI00876) and submission of Test Reports with test steps successfully passed PPP Co. must provide Event Recorder data analysis service within 6 hours of a request from RailCorp at no cost to RailCorp

Item	ID	Reliance Rail Ref	RailCorp Determination	RailCorp Ref	Timescale for Resolution	Defect/Issue	Rectification Method & relevant Conditions of Acceptance
183	MD-0684	RR#11901	Minor Defect	RC07596	diligently. RR has indicated this MD	Data Links status screen is not implemented The Defect is that Data Links status screen is not implemented. Please note the Data Link will not be working as the Set Borne Gateway is disabled. Refer to MD-0623 (SBG Defect) TPS Appendix M	Compliant solution to be re-tested (CTI00872 test step 14) and submission of Test Reports with test steps successfully passed
184	MD-0685	RR#11901	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified by PC of Set 3		Compliant software solution to be re-tested (CTI00872 test step 29) and submission of Test Reports with test steps successfully passed PPP Co On Train Technician to be supplied and check status until Defect rectified
185	MD-0686	RR#11901	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified by PC of Set 3	eTIS incorrectly labels tractive effort (kN) as Torque (kNm) FRACAS DB927 TPS Appendix K	Compliant software solution to be re-tested (CTI00872 test step 63) and submission of Test Reports with test steps successfully passed
186	MD-0687	RR#11901	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified by PC of Set 3	The Event Recorder does not record actual service variance to the selected service timetable. FRACAS DB962 TDB 7.4.3	Compliant software solution to be re-tested (CTI01086 test step 7) and submission of Test Reports with test steps successfully passed
187	MD-0688	RR#11901	Minor Defect	RC07596	Expeditiously and diligently. RR has indicated this MD will be rectified by PC of Set 2	Intercar EDR Activated During Nightsafe logic incorrect (CER01038) The Defect is that whenever a car enters the nightsafe state, the Intercar EDR Activated During Nightsafe alert is always immediately triggered (regardless of the state of the EDR).	Compliant solution to be demonstrated and results reported formally to RailCorp. PPP Co On Train Technician to be supplied and check status until Defect rectified
188	MD-0689	RR#11901	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified by PC of Set 3		Compliant software solution to be re-tested CTI01224 section 5.3 test step 56 & CTI00878 test step 10) and submission of Test Reports with test steps successfully passed PPP Co On Train Technician to be supplied and check status until Defect rectified

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Item	ID	Reliance Rail Ref	RailCorp Determination	RailCorp Ref	Timescale for Resolution	Defect/Issue	Rectification Method & relevant Conditions of Acceptance
189	MD-0693	RR#12044	Minor Defect	RC07521	Expeditiously and diligently. RR has indicated this MD will be rectified by PC of Set 3	The Digital Voice Annunciator does not automatically switch volume levels in response to timetable settings. On run 616D the Digital Voice Annunciator did not switch volume levels when passing through Burwood. FRACAS DB1210 TPS 11.11.3	Compliant solution to be re-tested (Retest steps: 21 of CTI00877) and submission of Test Reports with test steps successfully passed PPP Co On Train Technician to be supplied and check status until Defect rectified
190	MD-0694	RR#11967	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified by PC of Set 7	Vandalism Test Failures Various Test Step failures have been found during the running of CTR01212 FRACAS DB1224 - 1240 TPS.6.11.3	Submission of revised Test Report to demonstrate relevant test steps have been successfully passed PPP Co acknowledges that Vandalism which is attributable to this Defect is not a Reimbursable Damage Event. Accordingly, PPP Co will bear the cost of repairing such Vandalism.
191	MD-0696	RR#12065	Treat as if Minor Defect	RC07596	Set 3 PC	Communications equipment does not meet requirements TPS.11.1.3 Communications Equipment Performance TPS.11.4.5 PEI Operation TPS.11.5.1 PA Audibility TPS.11.8 Speakers Sections on: Comms equipment performance, PEI operation, PA Audibility, Speakers in Crew and Passenger Area	Compliant solution to be re-tested (CTI00887) and submission of Test Reports with test steps successfully passed
192	MD-0698	RR#12065	Minor Defect	RC07590	Expeditiously and diligently. RR has indicated this MD will be rectified by PC of Set 3	CSS will not record the external CCTV once the guard, driver, or cleaner have removed their key or record within 300m from non-stopping stations TPS 11.10.1 The requirement is that the images from all external cameras and end of Set cameras shall be recorded when: (a) Crew are viewing external images; or (b) the Set is within 300m of a station; or (c) the Set is in the Normal state and is travelling at 5km/hr or less; or (d) the Set is in Presentation state.	Compliant solution to be re-tested (CTI01204 & CTI00894) and submission of Test Reports with test steps successfully passed
193	MD-0699	RR#12044	Minor Defect	RC07521	Expeditiously and diligently. RR has indicated this MD will be rectified by PC of Set 3		Compliant solution to be re-tested (Retest CTI01085 step 12) and submission of Test Reports with test steps successfully passed
194	MD-0702	RR#12065	Minor Defect	RC07596	Expeditiously and diligently. RR has indicated this MD will be rectified by PC of Set 2	On occasion an ICD fails to close on first attempt on canted track	Compliant solution to be re-tested and submission of Test Reports with test steps successfully passed PPP Co On Train Technician to be supplied and check status until Defect rectified

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195	MD-0703	RR#11965	Minor Defect	RC07207	Expeditiously and diligently. RR has indicated this MD will be rectified by PC of Set 7	Expeditiously and internal Passenger Lighting does not meet iP55 rating diligently. This means that only the passenger lights remain to be verified at PC of Set 1. All other items will be recified by PC of TPS.9.10.6	Submission of revised Test Report to demonstrate relevant test steps have been successfully passed (or provide equivalence to requirements as installed)
196	MD-0704	RR#11968	Quality Improvement Issue	RC07596	N/A	Step in alignment between centre partition and saloon end GRP, Also side wall and bulk head panels.	PPP Co to demonstrate quality improvements on Trains A04 - A09 and confirm this Defect is not present on Train A10 and subsequent Sets
							The requirement to rectify this Defect before Practical Completion will not be walved for Set 10 and subsequent Sets.
197	MD-0705	RR#11968	Quality Improvement Issue	RC07596	NIA	Standback profile and alignment is poor and not to required standard of workmanship	PPP Co to demonstrate quality improvements on Trains A04 - A25 and confirm this Defect is not present on Train A26 and subsequent Sets
							The requirement to rectify this Defect before Practical Completion will not be waived for Set 26 and subsequent Sets.
198	MD-0706	RR#11968	Quality Improvement Issue	RC07596	N/A	Light Diffuser Colour Inconsistencies, which create a mis-match in colour lighting throughout a deck or saloon	PPP Co to continue to blend diffusers on Trains A04 - A05 and confirm this Defect is not present on Train A06 and subsequent Sets
							The requirement to rectify this Defect before Practical Completion will not be waived for Set 4 and subsequent Sets.
199	MD-0707	RR#11968	Quality Improvement Issue	RC07625	N/A	Gaps at end of Air Diffusers	PPP Co to demonstrate quality improvements on Trains A04 - A25 and confirm this Defect is not present on Train A26 and subsequent Sets
							The requirement to rectify this Defect before Practical Completion will not be waived for Set 26 and subsequent Sets.
							PPP Co acknowledges that Vandalism which is attributable to this Defect is not a Reimbursable Damage Event. Accordingly, PPP Co will bear the cost of repairing such Vandalism.
200	MD-0708	RR#11968	Minor Defect	RC07596	Expeditiously and diligently.	hoof to manually special after the	Compliant solution to be developed, implemented by PPP Co and verified by RailCorp
					RR has indicated this MD will be rectified by Set 1 PC + 6 months	Access is required to the top of the trip cock mounted on the bogle to manually reset it after it RR has indicated this MD has been tripped. Track testing of the trip cock demonstrated that there was sufficient access to will be rectified by Set 1 manually reset the trip. An access improvement is sought however to make the device easier for PC + 6 months crew to access and operate. Trip manual reset in service should be an infrequent occurrence	
201	MD-0709	RR#11968	Minor Defect	RC07596	Expeditiously and diligently.	Design of Security for Kettle is not in place	Compliant solution to be developed, implemented by PPP Co and verified by RailCorp
					RR has indicated this MD will be rectified by Set 2		

Item	6	Rail Ref	RailCorp Determination	Ref	Resolution	Defect/Issue	Rectification Method & relevant Conditions of Acceptance
202	MD-0710	RR#12065	Minor Defect	RC07596	Expeditiously and Foul between left-ha diligently. When the forward so will be rectified by Set 7 operation of the Set PC	nd forward edge and lock linkage rod on end terminal door section of the detrainment ramp top cover is raised there is a minor foul with This only occurs during removal of the cover and not during normal	Compliant solution to be developed, implemented by PPP Co and subsequently verified by RailCorp
203	MD-0711	RR#11968	Minor Defect	RC07207	Expeditiously and diligently.	GRP seat surround sealing inadequate and improvement is required on sealing to ensure internal CCTV camera is sealed appropriately	Compliant solution to be developed, implemented by PPP Co and verified by RailCorp.
					RR has indicated this MD will be rectified by Set 1 PC + 1 month		
204	MD-0712	RR#11968	Quality Improvement Issue	RC07596	N/A	Painting of interior surfaces of interior access panels has not been done to specification	PPP Co to demonstrate quality improvements on Trains A04 - A05 and confirm this Defect is not present on Train A06 and subsequent Sets
							The requirement to rectify this Defect before Practical Completion will not be waived for Set 4 and subsequent Sets.
205	MD-0713	RR#11968	Quality Improvement Issue	RC07596	N/A	AC Hatch is inadequately aligned and header panel profile not to required standard of workmanship	PPP Co to demonstrate quality improvements on Trains A04 - A25 and confirm this Defect is not present on Train A26 and subsequent Sets
							The requirement to rectify this Defect before Practical Completion will not be waived for Set 26 and subsequent Sets.
206	MD-0715	RR#12015	Minor Defect	RC07521	Expeditiously and diligently. RR has indicated this MD will be rectified by 30/11/11	Expeditiously and New ITIL Service Management System incomplete Downer's new Service Management Infrastructure is still being implemented in accordance with Downer's IT Service Management System Design (CER01475-) which has been provided to will be rectified by 30/11/11 TLSS 2.2.2(a)	Issue to be deemed closed once RailCorp completes successful audit of PPP Co new Service Management system and processes
207	MD-0716	RR#12015	Minor Defect	RC07521	Expeditiously and diligently. diligently. accordance with Down been provided to RailC RR has indicated this MD has not been provided will be rectified by 12/8/11 TLSS 2.2.2(a)	only partially complete Security Management has been implemented in er's IT Service Management System Design (CER01475-) which has orp, but evidence of successful completion of security vulnerability testing	PPP Co to provide evidence of successful completion of security vulnerability testing showing relevant test steps have been passed PPP Co to submit an updated Security Threat & Risk Assessment (STRA)
208	MD-0717	RR#12015	Minor Defect	RC07521	Expeditiously and diligently. diligently. RR has indicated this MD will be rectified by 2/9/11	Expeditiously and Fleet Management Data Link to RailCorp only partially complete diligently. The Fleet Management Data Link (FMDL) Quality of Service (QoS) and Disaster Recovery (DR) will be rectified by 2/9/11 TLSS 2.2.3(e)	PPP Co to provide evidence of successful completion of testing showing relevant test steps have been passed
209	MD-0720	RR#12015	Minor Defect	RC07521	Expeditiously and diligently. RR has indicated this MD will be rectified by 2/9/11	Expeditiously and Set-Borne Gateway (SBG) not commissioned diligently. The Integration Platform is not being used operationally to support the Set Borne Gateway (SBG) RR has indicated this MD (SBG) TI SS 2 2 3(d) Integration Platform	Defect to be closed on provision of a Test Report for the associated FMFS release evidencing successful completion of appropriate System Qualification Testing of the FMFS-SBG interface.

Defect to be closed on PPP Co providing RailCorp with a Test Report for the associated FMFS release evidencing successful completion of appropriate commissioning testing of the FND utilising the FMFSSBG interface.	Expeditiously and diffigently. The Fleet Network Display (FND) not fully commissioned diffigently. The Fleet Network Display (FND) application is unable to transact data with the Sets as the Set-RR has indicated this MD Borne Gateway (SBG) has not yet been commissioned. will be rectified by 2/9/11	Expeditiously and difigently RR has indicated this MD will be rectified by 2/9/11	RC07521	Minor Defect	RR#12015	MD-0729	217
Defect to be closed on PPP Co providing RailCorp with a Test Report for the associated FMFS release evidencing successful completion of appropriate commissioning testing of transact data with the Sets as the the AMS utilising the FMFSSBG interface.	Alert Management System (AMS) not fully commissioned The Alert Management System (AMS) application is unable to Sel-Borne Gateway (SBG) has not yet been commissioned.	Expeditiously and diligently. RR has indicated this MD will be rectified by 2/9/11	RC07521	Minor Defect	RR#12015	MD-0728	216
Defect to be closed on PPP Co providing RailCorp with a Test Report for the associated FMFS release evidencing successful completion of appropriate commissioning testing of the SDM utilising the FMFSSBG interface.	Expeditiously and Set Data Management (SDM) not fully commissioned diligently. The Set Data Management (SDM) application (CES01426) is unable to transact data with the RR has indicated this MD Sets as the Set-Borne Gateway (SBG) has not yet been commissioned will be rectified by 2/9/11	Expeditiously and diligently. diligently. RR has indicated this MD will be rectified by 2/9/11	RC07521	Minor Defect	RR#12015	MD-0727	215
Detect to be closed on: 1. provision of a Test Report evidencing confirmation of OR #2799 closure via execution of an appropriate test; and 2. RailCorp and PPP Co confirm that the FMG can be used operationally to transact PMS data via the B2B Gateway (including System Views).	System Views only partially complete As per TLSS 2.7.6 Maintenance Management Information System D	Expeditiously and diligently. RR has indicated this MD will be rectified by 2/9/11	RC07521	Minor Defect	RR#12015	MD-0726	214
Defect to be closed on: 1. RailCorp and PPP Co confirm that the FMG can be used operationally to transact MMIS data; and 2. PPP Co providing RailCorp with the FMFS Non-Functional Requirements specification; and 3. PPP Co providing RailCorp with the a Test Report for the associated FMFS release evidencing the passing of test FMFS-TC-838.	Maintenance Management Information System (MMIS) only partially complete As per Maintenance Management Information System (MMIS) partially complete DTLSS 2.7.6	Expeditiously and diligently. As per Mair As per Mair As indicated this MD TLSS 2.7.6 will be rectified by 2/9/11	RC07521	Minor Defect	RR#12015	MD-0725	213
Defect to be closed on provision of a Test Report evidencing confirmation of OR closure by successful completion of test FMFS-TC-807 or similar	WCME interface only partially complete As per TLSS 2.7.6 Maintenance Management information System	Expeditiously and diligently. RR has indicated this MD will be rectified by 12/8/11	RC07521	Minor Defect	RR#12015	MD-0724	212
Defect to be closed on provision of a Test Report evidencing confirmation of closure of ORs #2872, #2537 and #2539 by successful completion of tests FMFS-TC-808 and FMFS-TC-854	Weighbridge interface only partially complete As per TLSS 2.7.6 Maintenance Management Information System	Expeditiously and diligently. RR has indicated this MD will be rectified by 12/8/11	RC07521	Minor Defect	RR#12015	MD-0723	211
Defect to be closed on provision of a Test Report evidencing successful completion of : 1. agreed end-to-end testing of the transactions listed; and 2. test FMFS-TC-989; and 3. appropriate testing of the expiry date/time parameter.	B2B transactions only partially complete As per TLSS 2,7.6() Transactions List D	Expeditiously and diligently. RR has indicated this MD will be rectified by 2/9/11	RC07521	Minor Defect	RR#12015	MD-0721	210
Rectification Method & relevant Conditions of Acceptance	Defect/Issue	Timescale for Resolution	RailCorp Ref	RailCorp Determination	Rail Ref	Б	Item

Item 218	S O	Reliance Rail Ref RR#12015	RailCorp Determination Minor Defect	Ref Ref RC07521	Resolution Resolution Expeditiously and diligently.	Defect/Issue Train Crew Display Emulator (TCDE) not fully commissioned	Defect to be closed on PPP Co providing RailCorp with a Test Report
218		R#12015	Minor Defect	RC07521	Expeditiously and diligently. RR has indicated this MD will be rectified by 2/9/11	Expeditiously and diligently. Train Crew Display Emulator (TCDE) not fully commissioned diligently. The Train Crew Display Emulator (TCDE) application is unable to transact data with the Sets as RR has indicated this MD the Set-Borne Gateway (SBG) has not yet been commissioned. will be rectified by 2/9/11	Defect to be closed on PPP Co providing RailCorp with a Test Report for the associated FMFS release evidencing successful completion of appropriate commissioning testing of the TCDE utilising the FMFS-SBG interface.
219	9 MD-0735	RR#12065	Minor Defect	RC07590	Expeditiously and diligently. RR has indicated this MD FRACAS 1299 will be rectified by Set 3 TPS 9.7.1 CompC	sly runs the compressor if the Main Reservo pressor Management 1-RFTA00055 states: outrol the compressor and drier operation in c	ir is isolated. Demonstration with RailCorp invited to witness. The compressor management order to achieve the reliability and
220	0 MD-0736	RR#12056	Minor Defect	RC07521	Expeditiously and disgently. RR has indicated this MD will be rectified by Set 1 PC + 1 day	CT100822 cannot be completed until the Waratah Decal and the EDR Anti Tamper decals are fitted.	EDR Anti Tamper decals are Waratah Decals fitted
221	1 MD-0737	 RR#12044	Treat as if Minor Defect	RC07521	Set 1 PC + 3 months	Outstanding SW SIL 2 Certification to EN50128 for Door DCU Software DCU software although tested and released by the Design Authorities as suitable for passenger revenue service will not have an independent certification available until after Set 1 PC TPS.3.5.5 Safety Systems.1 TDB 3.5.5 Safety Systems.3	Submission of final TUV Nord SIL 2 certificate and acceptance by RailCorp tites as suitable for passenger e until after Set 1 PC.
222	2 MD-0741	RR#12044	Minor Defect	RC07521	Expeditiously and diligently. RR has indicated this MD will be rectified by Set 1 PC + 6 months	Expeditiously and diligently. Car Ride not better than M Set in all cases Testing has shown that whilst the ride of A Set and M set are generally equivalent, the ride index RR has indicated this MD was not always equal or better than M Set by a small amount at some measurement locations. will be rectified by Set 1 PC + 6 months TPS Appendix F	PPP Co to submit Statistical analysis (CTR01220) to show that the Waratah meets the requirement, the ride index ome measurement locations. Until this Defect is resolved the maximum speed for operation in defelated air spring condition is to be 65km/h (eTIS display will indicate 80km/h) which is a change to the issued Performance Operating Standard
223	3 MD-0742	RR#12044	Treat as if Minor Defect	RC07521	Set 11 PC	Outstanding issues with ride reports CTR01220 and CTR00783 There are a number of aspects of the ride test reports CTR01220 and CTR00783 where clarifications are required	Compliant solution to be re-tested (CTI01220 and CTI00783) and submission of Test Reports with test steps successfully passed
224	4 MD-0743	RR#12044	Treat as if Minor Defect	RC07596	Set 11 PC	Parts of Car Ride test CTR01220 not conducted fully in accordance with CTI Due to operational restrictions, not all aspects of CTI01220 could be fully complied with as follows: a) The M Set provided by Railcorp for the crush ride test did not have recently overhauled bogies, although the wheelsets were recently turned. b) TOC waivers were not in place to allow the Set to be run at XPT speed boards over the nominated test routes and for the same reason hunting stability was not evaluated up to 143km/h as part of CTR01220-001.	could be fully complied with as Until this Defect is resolved the maximum speed for operation in defelated air spring condition is to be 65km/h (eTIS display will indicate 80km/h) which is a change to the issued Performance Operating Standard at XPT speed boards over the lity was not evaluated up to

Item	ID	Reliance Rail Ref	RailCorp Determination	RailCorp Ref	Timescale for Resolution	Defect/Issue	Rectification Method & relevant Conditions of Acceptance
225	MD-0744	RR#12044	Minor Defect	RC07521	Expeditiously and diligently. RR has indicated this MD will be rectified by Set 1 PC + 1 month	VRM Annex B is at SC status TDB Verification Methods not agreed: TDB.11.10.4 CCTV Images.25-RFTA00290	Verification Requirements Matrix, CER1356 to achieve NR status from RailCorp following re-submission from PPP Co
226	MD-0745	RR#12056	Treat as if Minor Defect	RC07596	Set 2 PC	Retesting of CCTV alert on 4th door obstruction TPS.6.7.1.7 Obstruction Detection.3 Retesting need to be done on CTI01240 sect 5.2 test steps 11 and 12	Compliant solution to be re-tested (Retest CTI01240 sect 5.2 test steps 11 and 12) and submission of Test Reports with test steps successfully passed
227	MD-0746	RR#12065	Treat as if Minor Defect	RC07596	Set 2 PC	TPS.6.7.2.1 DVA and Door Closing.2-RFTA00039A Retesting need to be done on CTI00958 CN01 Passenger Bodyside Door Type Test (DEDIR) test step 11.2	Compliant solution to be re-tested (Retest CTI00958 CN01 Passenger Bodyside Door Type Test (DEDIR) test step 11.2) and submission of Test Reports with test steps successfully passed
228	MD-0748	RR#12056	Treat as if Minor Defect	RC07521	Set 2 PC	Update to Project Plans (TLS RTM) TLS RTM has recently been submitted and being reviewed by RC.	Submission of TLS RTM achieving NR status from RailCorp
229	MD-0749	RR#12065	Treat as if Minor Defect	RC07590	Set 7 PC	Verification has not been performed to confirm that the CSS amplifiers can withstand 110VDC applied across either input or output. Note that the power / output / input connectors are all keyed differently to mitigate the possibility of inadvertent application	Compliant solution to be re-tested (CTR00885) and submission of Test Reports with tes steps successfully passed
230	MD-0751	RR#12065	Minor Defect	RC07590		On 28 Feb it took 16 minutes to remove the DVRs from the Set. Time to be improved. Contract Requirement 11.10.7.5 TPS.11.10.7.5 Physical retrieval of images.2 RailCorp shall be able to use its standard physical retrieval protocol to manage this process	Compliant solution to be re-tested (CTR01240) and submission of Test Reports with tes steps successfully passed
231	MD-0752	RR#12065	Minor Defect	RC07590		Metronet interconnecting terminal strip is not installed. The terminal strip was designed to simplify removal and replacement of Metronet units. DEDIR have harnessed Metronet without the use of the terminal strip using plugs and connectors. ECR 20538 has been raised.	Compliant solution to be re-tested (CTR01240) and submission of Test Reports with tes steps successfully passed
232	MD-0753	RR#12056	Minor Defect	RC07521		Lamp Test Certain indicator lamps / illuminated buttons on the rear wall of the crew cab have been excluded in the design from the "lamp test" function provided for the indicator lamps / illuminated buttons on the crew desks and door pillars. This is a design omission and not a test failure, and has been detected during the SVR process. The indicators current not illuminated include (on each side of the cab): Car 1 Overshoot, Car 2 Overshoot, EDR Stage 1, EDR stage 2, EDR Override	A pass test result which includes the successful illumination of the 10 rear wall mounted indicators in the cab. Until relevant modification is implemented, train preparation must include the three step listed below. * operate the toggle function of the Overshoot functions and observe the illumination of these lamps, * open the cover of an internal passenger side door EDR (stage 1). * operate the "override" button, and then activate the EDR (stage 2)

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Compliant solution to be re-tested (CTI00872) and submission of Test Reports with test steps successfully passed.	CTI00872 rev E not run (CTI00872 rev D has been run). CTI00872 rev E has not been run, CTI00872 rev D has. CTI00872E addresses red line mark ups arising from minor editorial issues with revD.	Set 1 PC + 2 months	RC07596	Treat as if Minor Defect	RR#12205	MD-0759	238
	Refer to RC04970 and RC05233 where RailCorp agree to accept a Minor Defect for a temporary speedometer solution (auxiliary speed gauge enabled with the eTIS analogue and digital displays blanked) pending the development of a SIL 1 speedometer in eTIS.						
Compliant solution to be re-tested (Re-run CTI01085 steps on eTIS speedo) and submission of Test Reports with test steps successfully passed. The requirement for subsequent Sets to have a SIL 1 eTIS speedo at PC will not be waived after the earlier of PC of Set 6 or 31 July 2011 (unless both parties agree otherwise) – see point (2) of RC05233.	Compliant solution to be re-tested (Re-run CTi01085 steps on eTIS speedo) and submission of Test Reports with test steps successfully passed. The requirement for an analogue and digital representation. "TOS_Appendix K. 92 states "Monitor Train Speed in kmh"TOS. Appendix K. 100-RFT A00363 states "The TOS shall display Set speed "This defect is of PC of Set 6 or 31 July 2011 (unless both parties agree otherwise) — see point (2) of that the TOS screen does not display the speedometer reading.	Set 8 PC (unless both parties agree otherwise) see point (6) RC04970	RC07596	Treat as if Minor Defect	RR#12056	MD-0758	237
status from RailCorp	CTIs to be updated.	RR has indicated this MD will be rectified by Set 3					
Documents CFD01141; CFD01142; CTI00895, CTI00896 to be updated and obtain NR	Human Factors reports and CTIs for Internal Destination Indicator and External Destination	Expeditiously and	RC07596	Minor Defect	RR#12065	MD-0756	235
	TPS.46.1 TPS.10.2.18						
	-	RR has indicated this MD will be rectified by Set 1 PC + 6 months					
	Signalling interference non-compliance During the testing of signalling interference (CTIO1099), a test step created by RailCorp was to modifyladjust the signalling equipment (infrastructure) such that a 50Hz track circuit became	Expeditiously and diligently.	RC07596	Minor Defect	RR#12056	MD-0755	234
	TDB.9.25.11	RR has indicated this MD TPS.9.25.11 will be rectified by Set 1 TDB.9.25.11 PC + 6 months					
	Climate Control System Crew Resets The design of the CCS provides Automatic resets for system faults.	Expeditiously and diligently.	RC07521	Minor Defect	RR#12056	MD-0754	233
Rectification Method & relevant Conditions of Acceptance	Defect/Issue	Resolution	Ref	Determination	Rail Ref	5	mem

Item	ID	Reliance Rail Ref	RailCorp Determination	RailCorp Ref	Timescale for Resolution	Defect/Issue	Rectification Method & relevant Conditions of Acceptance
239	MD-0761	RR#12065	Treat as if Minor Defect	RC07596	PC Set 2	CCTV end to end formal testing is not completed CTI01204 section 5.13.3 (CCTV images - fire) not completed and witnessed. End to end formal test has not been conducted on Set. Additionally the following has not been verified; "The CCTV monitors in any Crew Cab with an active Guard's workstation shall continuously display internal passenger area images unless: ii) the Set is at a point 300m before a station at which it is scheduled to stop. At this time external camera images need to be viewed on the appropriate platform side monitor until a point 300m beyond that station. The distances shall be independently adjustable on demand and at no cost to RailCorp; TPS.11.10.5.3	
240	MD-0763	RR#12065	Treat as if Minor	RC07590	PC Set 2	Compliance with TDB.7.4.1 description.20 has not been verified. Verification evidence to be	SVR for referenced requirements submitted and achieved NR status by RailCorp
			Defect			provided. TDB.7.4.1 Description:20 states: eTIS will store data on two servers arranged in a dual-redundant pair in each Set. The onboard storage capacity is defined by the hard disk capacity within these servers for the database.	,
241	MD-0764	RR#12065	Treat as if Minor Defect	RC07596	Set 3 PC	Compliance with TDB.7.4.1 description.26 has not been verified. Verification evidence to be provided. TDB.7.4.1 Description.26 states: The sub-system i/o rack software utilises event-driven software to respond to changes in input signal status and operate its outputs, with infrequent period scans e.g. at system start-up. The communications network involves typically two hops between the i/o racks and the DDU, leading to response time end-to end between an event occurring and its display on the DDU far less than one second. System latency in the event of a fail-over will be of the order of 1 second.	Test to be revised and then re-conducted and submission of Test Reports with test steps successfully passed
242	MD-0766	RR#12056	Treat as if Minor Defect	RC07521	Set 3 PC	Update to Project Plans (Software Systems Management Plan) The following document has not been returned within 20 business days of the Subject to Comments (SC) being received. * TLS Software Systems Management Plan	Submission of TLS Software Systems Management Plan achieving NR status from RailCorp
243	MD-0767	RR#12056	Treat as if Minor Defect	RC07521	Set 3 PC	Update to Project Plans (Systems Assurance Plan) The following document has not been returned within 20 business days of the Subject to Comments (SC) being received. *TLS Systems Assurance Plan	Submission of the Systems Assurance Plan achieving NR status from RailCorp
244	MD-0768	RR#12065	Minor Defect	RC07596	Expeditiously and diligently. RR has indicated this MD will be rectified by Set 1 PC + 9 months	Some brake hoses fitted to the brake calliper have been installed such that there is a minor non-conformance with respect to the drawing requirement(minimum bend radius). A minimum of 50mm bend radius is required for park brake hose (drawing 361000239) and 70mm bend radius for standard hose (drawing 361000240) respectively. There has been no impact on brake performance during testing and there are no signs of impending kinking. DEDIR consider the type of hose used is sufficiently flexible to accomodate this as installed	(ii) PPP Co to submit letter confirming no reports or signs of brake hose kinking identified

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Item 245	5 MD-0769	Rail Ref PR#12056	RailCorp of Determination Minor Defect	RailCorp Ref	Timescale for Resolution Expeditiously and diligently	Defect/Issue Rectification Method & relevant Conditions of Acceptance Inter-car AAP handle anti-tamper decals not fitted. Decal Design accepted by Railcorp and fitted to Set 1 (A03).
245			(13)	RC0/521	Expeditiously and diligently. RR has indicated this MD will be rectified by Set 1 PC + 3 months	Inter-car AAP handle anti-tamper decals not fitted. The tear away decal to cover the Inter-car door alternate access panel locking system has not the tear away decal to cover the Inter-car door alternate access panel locking system has not yet been designed and therefore is not able to be fitted to train A03 prior to PC of Set 1. TPS 6.7.3.3 modified by RFTA00359 requirement: TPS 6.7.3.3 modified by RFTA00359 requirement: The alternate access panel locking system shall be covered by a flush fitting tear away decals to prevent accidental operation and to reduce the likelihood of abuse by vandalism."
246	6 MD-0770)770 RR#12056	Treat as if Minor Defect	RC07521	Set 11 PC	Outstanding Issues with Bogie and Body Dynamic Strain Gauge Test reports CTR00782-00: and CTR00976-001 Much of the strain data gathered was unusable due to being corrupted by electromagnetic interference inherent on running electric trains. Better gauge wiring methods would have in hindsight avoided such severe interference.
249	9 MD-0773)773 RR#12056	Minor Defect	RC07596	Expeditiously and diligently. RR has indicated this MD will be rectified by Set 5	Seat Cushion fabric is loose / rucked. There are incidents spread across all cars on the train.
250	0 MD-0774)774 RR#12056	Minor Defect	RC07521	Expeditiously and diligently. RR has indicated this MD will be rectified by Set 1 PC + 9 months	In Service Evaluation of Climate Control In service evaluation is required to provide further demonstration that the Climate Control system operates effectively and is compliant with the specification.
251	1 MD-0775)775 RR#12065	Treat as if Minor Defect	RC07590	Set 2 PC	This defect is that evidence has not been provided to verify that the moving icon will "freeze under failure". The moving icon works correctly under both normal (rotating) and failed (freeze) conditions (i.e. is fit for purpose).
252	2 MD-0776	7776 RR#12056	56 Treat as if Minor	RC07596	Set 2 PC	Train run not recoverable using reset feature This defect is that evidence has not been provided to verify that "should the TOS system freeze and require resetting then any train run entered by the Crew shall be recoverable using a reset feature."
253	3 MD-0777	7777 RR#12056	Defect	RC07521	Expeditiously and diligently. RR has indicated this MD will be rectified by Set 2	Unauthorised opening of CBSD This defect is that no alert was provided on the TOS screen to the Driver upon unauthorised opening of CBSD Due 2024 has since these closed as it was found that a maintainer was keyed in at the time of the control of the control opening of CBSD.

Item	ID	Reliance Rail Ref	RailCorp Determination	RailCorp Ref	Timescale for Resolution	Defect/Issue	Rectification Method & relevant Conditions of Acceptance
260	MD-0785	RR#12065	Treat as if Minor Defect	RC07596	Set 2 PC	CTR00878 has test failures due to optic fibre faults being present These faults have been rectified and the system is working but the test has not yet been re- conducted	Test to be re-conducted (CTI00878) and submission of Test Reports with test steps successfully passed
261	MD-0786	RR#12065	Treat as if Minor Defect	RC07590	Set 2 PC	Data not provided to verify signal to noise ratio of Crew Audio Controller (CAC). Reissue CTR00886 (CES01234.89) Contract Requirement: TPS.11.1.3 Communications Equipment Performance.1 The signal to noise ratio for amplifiers shall be 70 dB or better, when any controls are adjusted for maximum output.	Compliant solution to be re-tested (CTR00886 as per CES01234.89) and submission of Test Reports with test steps successfully passed
262	MD-0787	RR#12065	Minor Defect	RC07590	Expeditiously and diligently. RR has indicated this MD will be rectified by Set 4 PC	Front panel of RMM twisted after drop test. RMM functions correctly. Address stiffness of front panel Contract Requirement: 5.5 Event Recorder_Appendix N.47-RFTA00174	Address stiffness of front panel Compliant solution to be re-tested and submission of Test Reports with test steps successfully passed
263	MD-0788	RR#12065	Minor Defect	RC07596	ENGREE AND DE STOWN TO SE	In service experience has identified a number of Over and Under Voltage trips being reported to Drivers from the EAPS via the ETIS. These are genuine incidents of either under voltage (below 950+/-47.5 Volts) of overvoltage (above 2400 +0, -240 Volts) in the overhead line / supply. Reporting should be limited to genuine fault conditions / scenarios. TPS 9.4.2 Fault Indication Initiation A loss of EAPS output that is not a result of variation of Main Power Supply (e.g. Line under or over voltage) shall generate a fault indication.	
265	MD-0790	RR#12065	Minor Defect	RC07596		Test Specification (CTI00958 CN01 Passenger Bodyside Door Type Test) has test step failures that are due to errors in the specification - F00684 – Delete entrapment point signage from test step, no entrapment points within door gear and not a requirement - F00438 (as a result of RFTA00380) – Change the adjustable time range to 4.5-8.0s from 3-8s - F00687 (as a result of RFTA00380) – The PSU graph measures the motor current not the closing force, CTI update required to convey this	Resubmit CTI00958 with updated test steps 4.2(a), 4.3(a), 27.2, 28.2, 27.8, 27.9 and achieve NR status from RailCorp
266	MD-0791	RR#12065	Treat as if Minor Defect	RC07596	Set 3 PC	CTI00958 CN01 Passenger Bodyside Door Type Test retesting of test steps 14.12, 14.13, 14.14 required due to adjustment of doors to close out F00685 – with sensitive edge turned off the door did not detect the 15mm test bar at the bottom of the door	Compliant solution to be re-tested (test steps 14.12, 14.13, 14.14 in CTI00958) and submission of Test Reports with test steps successfully passed

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Item	ID	Reliance Rail Ref	RailCorp Determination	RailCorp Ref	Timescale for Resolution	Defect/Issue	Rectification Method & relevant Conditions of Acceptance
267	MD-0792	RR#12065	Minor Defect	RC07590		CTI00959 CN01 Crew Bodyside Door Type Test has test step failures that are due to errors in the specification -F00688 — Delete entrapment point signage from test step, no entrapment points within door gear and not a requirement -F00692 — The requirement says "an aperture that shall prevent crew putting their head through the open window". Change in pass criteria required. -F00693 — Test step requires that speed >5km/h be active while conducting test. This is to be included in test step. -F00691 — Wrong obstruction detection message transmitted. Should be "Motor current monitoring at opening sequence was activated on a fixed number of successive opening attempts" -F00690 — Wrong obstruction detection message transmitted. Should be "Door does not close within a specific time"	Resubmit CTI00959 with updated test steps 4.2a, 17.6, 19.4, 22.7, 27.4, 27.8 and achieve NR status from RailCorp
268	MD-0793	RR#12065	Minor Defect	RC07590	Expeditiously and diligently. RR has indicated this MD will be rectified by Set 3 PC	CTI00960 CN01 Intercar Fire Door Type Test has test step failures that are due to errors in the specification -F00677 – In Nightsafe Mode, button B2 only opens subject car door and button B3 only opens adjacent door -F00678 – PSU doesn't connect to the local DCU port -F00679 – Intercar door peak force is not an adjustable parameter, the timing must be adjusted to change the closing force, this needs changing in CTI -F00680 – DOOR OPEN signals recorded are not those expected in test instruction."Door open limit switch" is actually "LS Door not closed", "Closed & locked" is actually "LS Door locked"; "Door open signal" is actually "Open push button".	Resubmit CTi00960 with updated test steps 3.41, 3.44, 3.52, 3.53, 3.54 and achieve NR status from RailCorp
269	MD-0794	RR#12065	Treat as if Minor Defect	RC07596	Set 3 PC	CTI00961 CN01 Door Operation Routine Delivery Test has test step failures that have been rectified but require re-testing - DB1130 - Security screws replaced - DB1131 - Security screws replaced - DB1132 - CBSD doesn't open when slammed closed manually - DB1134 - Security screws replaced	Set 1 to be be re-tested (test steps 1.1 and 4.3 in CTi00961) and submission of Test Reports with test steps successfully passed
270	MD-0795	RR#12065	Minor Defect	RC07590		CTI00961 CN01 Door Operation Routine Delivery Test has test step failures that are due to errors in the specification - 2.1 – Need to include "Sign in as driver" as precondition to test step - 6.3 – Change wording to 'Solid red tile' instead of "flashing tile" - 17.1 – Need to include "Sign in as driver" as precondition to test step - 19.1 – Need to include "Sign in as guard" as precondition to test step - 2.2 – Instruction to "cycle on/off" required in test step - 14.3 – " In the open direction" to be included in test step	Resubmit CTi00961 with updated test steps 2.1, 6.3, 17.1, 19.1, 2.2, 14.3 and achieve NR status from RailCorp
271	MD-0796	RR#12065	Treat as if Minor Defect	RC07596	Set 3 PC	CCTV frozen images are occurring. TPS.11.10.3 CCTV cameras.3 states "The CCTV cameras shall have a frame rate consistent with their function and not less than 6 frames per second (fps)". TPS.11.10.1 Overview.3 states "The system and recordings shall be of a quality in compliance with the evidence requirements of the Evidence Act 1995 (NSW)."	PPP Co to provide formal response to RailCorp's query over potential frozen images prior to Set 2 PC. If design development is necessary a compliant solution to be re-tested and submission of Test Reports with test steps successfully passed

Final List of Set 1 (A03) Minor Defects.xls

ltem	ID	Reliance Rail Ref	RailCorp Determination	RailCorp Ref	Timescale for Resolution	Defect/Issue	Rectification Method & relevant Conditions of Acceptance
272	MD-0797	RR#12065	Minor Defect	RC07596		TPS.6.7.2.3.5 Crew Override Facility.3-RFTA00198 states "The control panel shall include indicators displaying EDR Stage 1 and Stage 2 Activation of the EDRs." This defect is that the EDR "cover open" light (stage 1 indicator) remains illuminated when all EDR covers are closed while the EDR override is active.	Compliant solution to be re-tested and submission of Test Reports with test steps successfully passed PPP Co On Train Technician to be supplied and check status until Defect rectified
273	MD-0798	RR#12065	Minor Defect	RC07590	diligently. RR has indicated this MD	Equi-potential bond on PEI and Communications Consoles appears to be non compliant, having a stud but insufficient interface to the equipment body. <u>Contract Requirement</u> TPS,11.1.2 Communications Equipment Protection.1	Implementation of EI and RailCorp confirmation of adequacy by inspection
274	MD-0799	RR#12065	Treat as if Minor Defect	RC07590		100 volt constant potential balanced circuits have not been verified Contract Requirement TDB.11.5 Public Address System.26 Signal to noise ratio - equipment selected for use in the PA system will have signal to noise performance typical of high market	Compliant solution to be re-tested (CTI00887) and submission of Test Reports with test steps successfully passed
275	MD-0800	RR#12065	Minor Defect	RC07590	diligently. RR has indicated this MD will be rectified by Set 3 PC	Loudness variation for external PA exceeds 6dB (7.5dB on TDC). PPP Co believe this variation is fit for intended purpose. Contract Requirement: TPS.11.8.3 External Speakers.3 The loudness of announcements on platforms at a height of 1.5 m above platform surface and at 3 m from the side of the carriage shall be at least 9 dB above the normal ambient noise level. It shall be at least 75 dB(A) at a location of 3 m perpendicular to the Car body side and shall not vary by more than 6 dB between speaker locations along the Car.	steps successfully passed
276	MD-0801	RR#12065	Minor Defect	RC07590	diligently. RR has indicated this MD will be rectified by Set 3 PC	Loudness variation for internal PA exceeds 4dB (7.7dB on MC). PPP Co believe this variation is fit for intended purpose. Contract Requirement: TPS.11.8.1 The loudness of announcements over the speakers in the Passenger areas shall be evenly distributed with a maximum variation of 4 dB at a height of 1.2 m above the floor and shall not be such as to cause discomfort or hearing impairment	steps successfully passed
277	MD-0802	RR#12065	Minor Defect	RC07590	diligently. RR has indicated this MD will be rectified by Set 3	Signal to noise ratio is less than the expected 76dB (72.5 dB on Car 2) Contract Requirement: TDB.11.5 Public Address System.26 Signal to noise ratio - equipment selected for use in the PA system will have signal to noise performance typical of high market end commercial grade equipment	Compliant solution to be re-tested (CTI00887) and submission of Test Reports with test steps successfully passed
278	MD-0803	RR#12065	Minor Defect	RC07590		Basic frequency response variation is worse than specified. Average variation on Upperdeck is 4.5dB (3dB specified) for 125Hz to 8kHz, and 2.2dB (2 dB specified) for 250Hz to 4kHz. TPS 11.5.1 item (g)	Compliant solution to be re-tested (CTI00887) and submission of Test Reports with test steps successfully passed

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Item	Б	Reliance Rail Ref	RailCorp Determination	RailCorp Ref	Timescale for Resolution	Defect/Issue	Rectification Method & relevant Conditions of Acceptance
279	MD-0804	RR#12065	Minor Defect	RC07590	Expeditiously and diligently. RRR has indicated this MD will be rectified by Set 3	Expeditiously and diligently. Audio system quiescent noise is less than 6dB below ambient (4.5dB in TDC). Contract Requirement: Contra	Compliant solution to be re-tested (CT100887) and submission of Test Reports with test steps successfully passed
280	MD-0805	RR#12065	Minor Defect	RC07590	Expeditiously and The internal PA on the difigently. Opinion Score. Opinion	crew cab speaker is fit for purpose but does not meet the target Mean not never the target Mean not not never the target Mean never the target Mean not never the target Mean never the target	Compliant solution to be re-lested (CTI00887) and submission of Test Reports with test steps successfully passed
281	MD-0806	RR#12065	Minor Defect	RC07590	Expeditiously and diligently. RR has indicated this MD will be rectified by Set 3 PC	Expeditiously and The PEI initially heard by crew over the Crew Cab speakers is low in volume. Contract Requirement RR has indicated this MD TPS.11.8.2 Speakers in Crew Areas.1 will be rectified by Set 3 Speaker assemblies shall be provided in the Crew Cabs to provide clear communication in all normal-operating conditions from the PA, DVA, Train Radio, Intercom and like systems.	Compliant solution to be re-tested (CTR00887 section 8:10.3.3) and submission of Test Reports with test steps successfully passed
282	MD-0807	RR#12065	Minor Defect	RC07590	Expeditiously and diligently. The DVA heard by crew Mean Opinion Score. Mean Opinion Score. Mean Opinion Score. Mean Opinion Score. The DVA heard by crew Mean Opinion Score. Mean Opinion Score. Mean Opinion Score. The DVA heard by crew Mean Opinion Score. Mean Opinion Scor	w on the crew cab speakers is fit for purpose but does not meet the target n Crew Areas. 1 nall be provided in the Crew Cabs to provide clear communication in all titons from the PA, DVA. Train	Compliant solution to be re-fested (CTI00887) and sisteps successfully passed
283	MD-0808	RR#12065	Minor Defect	RC07590	Expeditiously and diligently, and diligently. RR has indicated this MD will be rectified by Set 3 PC	Expeditiously and The Crew Intercom initially heard over the Crew Cab Speakers is low in volume. Contract Requirement TPS. 11.8.2 Speakers in Crew Areas. 1 will be rectified by Set 3 Speaker assemblies shall be provided in the Crew Cabs to provide clear communication in all normal-operating conditions from the PA, DVA, Train Radio, Intercom and like systems.	Compliant solution to be re-tested (CTR00887 section 8.10.3.2) and submission of Test Reports with test steps successfully passed
284	MD-0809	RR#12065	Minor Defect	RC07590	Expeditiously and diligently. RR has indicated this MD will be rectified by Set 3 PC	Expeditiously and The PEI heard by passengers is fit for purpose but does not meet the target Mean Opinion diligently. RR has indicated this MD Contract Requirement will be rectified by Set 3 TPS.11.8.2 Speakers in Crew Areas.1 PC normal-operating conditions from the PA, DVA, Train Radio, Intercom and like systems.	Compliant solution to be re-tested (CTI00887) and submission of Test Reports with test steps successfully passed

Item	ID	Reliance Rail Ref	RailCorp Determination	RailCorp Ref	Timescale for Resolution	Defect/Issue	Rectification Method & relevant Conditions of Acceptance
285	MD-0810	RR#12205	Treat as if Minor Defect	RC07596	Set 3 PC	Internal CCTV camera mappings not formally verified following re-mapping. Internal CCTV Camera mappings used to automatically trigger CCTV images to crew upon certain events has not been formally verified. This defect is that test steps that failed due to CCTV internal camera mappings being incorrect have not yet been formally re-run.	Revised Test Specification (CTI01240) to be submitted and achieve NR status from RailCorp and the re-conduct Test and submission of Test Reports with test steps successfully passed
286	MD-0811	RR#12205	Treat as if Minor Defect	RC07625	Set 3 PC	Completion of a run without an operational TOS has yet to be verified. TPS.7.4. Train Operating System.3 states "The Set shall be able to complete a run without an operational TOS. During the course of such a run safety critical alarms shall be transmitted to the Driver and Guard and both shall retain control of safety critical systems." This defect is that the completion of a run has not been formally demonstrated (tested) without an operational TOS (eTIS).	PPP Co to re-conduct Test (Run CTI01002 steps 4, 11 and 14) and submission of Test Reports with test steps successfully passed
287	MD-0812	RR#12205	Minor Defect	RC07596		Open Audit NCRs related to SVR TPS.3.5.1 Standards.1 states "PPP Co must demonstrate to the satisfaction of RailCorp that its ICT systems approach is compliant with the following standards (except to the extent that RailCorp agrees otherwise):" This defect is that audit findings SVR20 - RIA001496 "RSM ICT subsystems are not being managed against the ITIL framework" and SVR20 - RIA001506 "No evidence of an approach to the management of Intellectual Property" are associated with TPS.3.5.1 Standards.1 and have not been closed prior to PC Set 1.	RailCorp agreement to the closure of audit findings SVR20 - RIA001496 and SVR20 - RIA001506
288	MD-0813	RR#12205	Treat as if Minor Defect	RC07596	Set 2 PC	Non provision of IP data for FMFS. TDB.3.5.2 Avoidance of Proprietary Technologies.5 states " To achieve this, the EDI Rail - Hitachi Joint Venture will acquire intellectual property including source code, passwords, software licences, the development facilities and the right to continue to develop the software products without further permission from the original authors". This defect is that evidence has not been provided to RailCorp to verify that IP has been acquired for the FMFS component.	IP Register for FMFS to be provided to RailCorp and licence agreement signed by all parties in place
289	MD-0815	RR#12205	Minor Defect	RC07596	Expeditiously and diligently. RR has indicated this MD will be rectified by Set 2 PC	Terminal End Emergency Door Seals not sealing at top edge RC inspection has identified that Terminal End Emergency Door Seals are not sealing at top edge.	Inspection of Set 1 (A03) verified by RailCorp that relevant installation / design improvements have been successful
290	MD-0816	RR#12205	Quality Improvement Issue	RC07596	N/A	Access panel above the fixed three-seaters can foul the centre partition when opened, damaging the centre partition	Inspection of Set 26 (A26) verified by RailCorp that relevant installation / design improvements have been successful The requirement to rectify this Defect before Practical Completion will not be waived for Set 26 and subsequent Sets.

Item	ID	Reliance Rail Ref	RailCorp Determination	RailCorp Ref	Timescale for Resolution	Defect/Issue	Rectification Method & relevant Conditions of Acceptance
291	MD-0817	RR#12205	Minor Defect	RC07596	Expeditiously and diligently. RR has indicated this MD will be rectified by Set 2 PC	Pantograph raise / lower push buttons not marked This issue will be mitigated on Train A03 through temporary labels and fix the correct labels as soon as the decals become available.	Inspection of Set 1 (A03) verified by RailCorp that correct labels have been successfully installed
292	MD-0818	RR#12205	Minor Defect	RC07596	Expeditiously and diligently. RR has indicated this MD will be rectified by Set 2 PC	Coupling clamps and wiring loom support brackets being installed incorrectly	Inspection of Set 1 (A03) verified by RailCorp that relevant installation / design improvements have been successful
293	MD-0819	RR#12205	Minor Defect	RC07596	Expeditiously and diligently. RR has indicated this MD will be rectified by Set 5	CCTV download equipment and operator procedures to be updated. TPS.11.10.7.5 Physical retrieval of images.3 states: Unless otherwise specified, PPP Co shall supply two (2) sets of all necessary tools and equipment required to perform such retrieval.	Demonstration of CCTV download methodology and use of procedures agreed acceptable by RailCorp PPP Co. must provide CCTV download analysis service within one business day of request from RailCorp until this issue is closed
294	MD-0820	RR#12205	Minor Defect	RC07596		CCTV images may not be stamped with all recording metadata as this can be changed by the user TPS.11.10.7.4 Date and Set Location Recording.1 states "All images shall be stamped with the Car number, camera location, time and date of recording and an indication of the location of the Set on the Rail Network. The form of Set location indication is to be agreed with RailCorp."	Compliant solution to be re-tested (CTI00888) and submission of Test Reports with test steps successfully passed
295	MD-0821	RR#12205	Treat as if Minor Defect	RC07596	Set 7 PC	Attenuation of GPS antenna cable does not meet requirements and verification evidence is not yet provided Contract Requirement: TPS.11.15.3 GPS Equipment.1 (f) The antenna position, with respect to the receiver, and feeder cable chosen, shall be such that no more than 3dB attenuation occurs in the RF feeder cable in the L1 band; (g) The equipment, including antenna shall not be affected by other Set systems, in particular the transmissions from transponder interrogator readers and Train Radio, both MetroNet and future Digital Train Radio;	Compliant solution to be re-tested (CTI00894) and submission of Test Reports with test steps successfully passed
297	MD-0823	RR#12205	Treat as if Minor Defect	RC07596	Set 2 PC	Non provision of MetroNet T7100 Certificate of Conformance TPS.11.12.1.2.6 MetroNet Radio Unit (MRU).1 is NR for the T700 radio but SC for the T7100 type. RailCorp requires a Certificate of Conformance for T7100 and to date, this has not been issued. This defect relates only to SVR compliance traceability and radio fitted to A03 is of T700-type	MetroNet T7100 Certificate of Conformance submitted to RailCorp

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110111	298	299	300
ē	MD-0824	MD-0825	MD-0826
Rail Ref	RR#12205	via email Youds / Collishaw dated 7/6/11	
Determination	Minor Defect	Minor Defect	Treat as if Minor Defect
Ref	RC07596	RC07596	RC07596
Resolution	Expeditiously and diligently. RR has indicated this MD will be rectified by Set 2 PC	Set 7 PC	Set 2 PC
PAGENATIONS	Expeditiously and diligently. Event Recorder_Appendix N.85 Event Recorder_Appendix N.86 Will be rectified by Set 2 TPS.11.16.1 Overview.6 Will be rectified by Set 2 TPS.17.4.3.1 Internal Crew Cab Bodyside Door EDRs.3-RFTA00198 TPS.6.7.4.3.2 External Crew Cab Bodyside Door EDRs.7-RFTA00198 TPS.6.7.4.3.2 External Crew Cab Bodyside Door EDRs.7-RFTA00198 TDB.11.1.2 Communications Equipment Protection.1 TDB.11.4.5 PEI Operation.6 TDB.7.4.9 Integrated Support 10 TPS.6.7.3 Crew Transverse Door Window.3-RFTA00322 TPS.6.7.5.3 Crew Transverse Door Window.3-RFTA00322 This defect is that RC will have less than 20 business days to review the additional verification evidence.	Underframe end unit traction bracket closure plate not fabricated correctly in accordance with design	Safety Management Plan has open issues that require addressing
ANIENDANY IN CHANINIAN IN EASTER PRINTED	CER01565 Rev 'S' submitted and achieving NR for the referenced requirements	The resolution of this NCR will be for Engineering fatigue analysis to be conducted determine the expected fatigue life and to determine if any fabrication rework is necessary longer term. NCRs need to be raised for the traction brackets on Set A03 not having closure plate 354002659- not being located flush with its adjacent gusset and side plate in the traction bracket assembly 054000466A.	Submission to RailCorp of revised Safety Management Plan achieving NR status from RailCorp