PROJECT	CUSTOMER	TRAIN
Xtrapolis-PRASA	**PRASA**	**211 – TFS**

RTR Train Functional Static Testing TS211 Report

GIB0000006243

	CREATED	VERIFIED	APPROVED	DISTRIBUTION
Name	Kealeboga MOCWAGOLE	Nkululeko NDOVELA	Kgomotso NKOANA	Confidentiality Category *Restricted* ☐ *Project* ☐ *Normal* ☑
Date	11/03/2024	11/03/2024	11/03/2024	Control Category *Controlled* ☑ *Not Controlled* ☐
Signature				Language **EN**

This report has been automatically generated from TES version 1

Table of modifications

Rev	Date	Modifications Content	Writer
A0	11/03/2024	Creation	Kealeboga MOCWAGOLE

Internal validations

	Name	Function	Date	Signature
Creator	Kealeboga MOCWAGOLE	EPU Manager	11/03/2024	X Kealeboga MOCWAGOLE EPU Manager
Verifier	Nkululeko NDOVELA	Test Engineering Manager	11/03/2024	X Nkululeko NDOVELA Test Engineering Manager
Approver	Kgomotso NKOANA	Test Expert	11/03/2024	X Kgomotso NKOANA Test Expert

Execution Plan

Start Date	05/03/2024
End Date	10/03/2024

Contents

Section 1 – Purpose / Objectives

Section 2 – Main Circuit Breaker Control

2.3 Instructions list

2.3.1 022_HSC-Main Circuit Breaker Control

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	Main Circuit Breaker Control=SPP 022		OK		Tshembhani Khosa - 446920	Train
10002	I	Initial Conditions		OK		Tshembhani Khosa - 446920	Train
10003	I	This test is to verify the correct operation of the main high voltage circuit breaker.		OK		Tshembhani Khosa - 446920	Train
10004	I	Train in LV ready		OK		Tshembhani Khosa - 446920	Train
10005	I	The catenary should be switched OFF		OK		Tshembhani Khosa - 446920	Train
10006	I	Circuit breaker 34Q1 should be closed in all Propulsion boxes		OK		Tshembhani Khosa - 446920	Train
10007	I	No Fire Detection alarm on the DDU screen		OK		Tshembhani Khosa - 446920	Train
10008	I	Start Test		OK		Tshembhani Khosa - 446920	Train
10009	I	HSCB control without High Voltage		OK		Tshembhani Khosa - 446920	Train
10010	I	For this test, the HSCB control will be tested with no high voltage present to prevent degraded mode in the train in case there is wiring error		OK		Tshembhani Khosa - 446920	Train
10011	I	The button 27S5 should not be pressed on both cars		OK		Tshembhani Khosa - 446920	Train
10012	A	Active Cab on TC1		OK		Tshembhani Khosa - 446920	Train
10013	R	Read Defined Variable [TT] (MPU1)TBCU1_LI_DEMCL_HSCB = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10014	R	Read Defined Variable [TT] (MPU1)tbcu2_li_demcl_hscb = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10015	R	Read Defined Variable [TT] (MPU1)tbcu3_li_demcl_hscb = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10016	R	Read Defined Variable [TT] (MPU1)tbcu4_li_demcl_hscb = 0.0		OK	0	Tshembhani Khosa - 446920	Train

10017	R	Read Defined Variable [TT] (MPU1)TBCU1_LI_HSCB_CL = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10018	R	Read Defined Variable [TT] (MPU1)tbcu2_li_hscb_cl = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10019	R	Read Defined Variable [TT] (MPU1)tbcu3_li_hscb_cl = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10020	R	Read Defined Variable [TT] (MPU1)tbcu4_li_hscb_cl = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10021	R	Read Defined Variable [TT] (MPU1)TBCU1_LI_HSCB_HOLD = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10022	R	Read Defined Variable [TT] (MPU1)tbcu2_li_hscb_hold = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10023	R	Read Defined Variable [TT] (MPU1)tbcu3_li_hscb_hold = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10024	R	Read Defined Variable [TT] (MPU1)tbcu4_li_hscb_hold = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10025	R	Read Defined Variable [TT] (MPU1)TBCU1_LI_HSCB_OP = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10026	R	Read Defined Variable [TT] (MPU1)tbcu2_li_hscb_op = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10027	R	Read Defined Variable [TT] (MPU1)tbcu3_li_hscb_op = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10028	R	Read Defined Variable [TT] (MPU1)tbcu4_li_hscb_op = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10029	R	Read Defined Variable [TT] (MPU1)li_hsc_m1hscbopenr2 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10030	R	Read Defined Variable [TT] (MPU1)li_hsc_m2hscbopenr1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10031	A	Press the button 21S1 to raise Pantographs		OK		Tshembhani Khosa - 446920	Train
10032	A	Force [TT] (MPU1)Lo_HSC_Tc1HSCBCLOSE_R1 = 1.0		OK		Tshembhani Khosa - 446920	Train
10033	A	Force [TT] (MPU1)Lo_HSC_Tc1HSCBCLOSE_R2 = 1.0		OK		Tshembhani Khosa - 446920	Train

10034	A	Force [TT] (MPU1)Lo_HSC_Tc2HSCBCLOSE_R1 = 1.0		OK		Tshembhani Khosa - 446920	Train
10035	A	Force [TT] (MPU1)Lo_HSC_Tc2HSCBCLOSE_R2 = 1.0		OK		Tshembhani Khosa - 446920	Train
10036	R	Read Defined Variable [TT] (MPU1)li_fsd_tc1firedetection = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10037	R	Read Defined Variable [TT] (MPU1)li_fsd_tc2firedetection = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10038	R	Read Defined Variable [TT] (MPU1)TBCU1_LI_DEMCL_HSCB = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10039	R	Read Defined Variable [TT] (MPU1)tbcu2_li_demcl_hscb = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10040	R	Read Defined Variable [TT] (MPU1)tbcu3_li_demcl_hscb = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10041	R	Read Defined Variable [TT] (MPU1)tbcu4_li_demcl_hscb = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10042	R	Read Defined Variable [TT] (MPU1)TBCU1_LI_HSCB_CL = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10043	R	Read Defined Variable [TT] (MPU1)tbcu2_li_hscb_cl = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10044	R	Read Defined Variable [TT] (MPU1)tbcu3_li_hscb_cl = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10045	R	Read Defined Variable [TT] (MPU1)tbcu4_li_hscb_cl = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10046	R	Read Defined Variable [TT] (MPU1)TBCU1_LI_HSCB_HOLD = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10047	R	Read Defined Variable [TT] (MPU1)tbcu2_li_hscb_hold = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10048	R	Read Defined Variable [TT] (MPU1)tbcu3_li_hscb_hold = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10049	R	Read Defined Variable [TT] (MPU1)tbcu4_li_hscb_hold = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10050	R	Read Defined Variable [TT] (MPU1)TBCU1_LI_HSCB_OP = 0.0		OK	0	Tshembhani Khosa - 446920	Train

10051	R	Read Defined Variable [TT] (MPU1)tbcu2_li_hscb_op = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10052	R	Read Defined Variable [TT] (MPU1)tbcu3_li_hscb_op = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10053	R	Read Defined Variable [TT] (MPU1)tbcu4_li_hscb_op = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10054	R	Read Defined Variable [TT] (MPU1)li_hsc_m1hscbopenr2 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10055	R	Read Defined Variable [TT] (MPU1)li_hsc_m2hscbopenr2 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10056	A	Release [TT] (MPU1)Lo_HSC_Tc1HSCBCLOSE_R1		OK		Tshembhani Khosa - 446920	Train
10057	A	Release [TT] (MPU1)Lo_HSC_Tc1HSCBCLOSE_R2		OK		Tshembhani Khosa - 446920	Train
10058	A	Release [TT] (MPU1)Lo_HSC_Tc2HSCBCLOSE_R1		OK		Tshembhani Khosa - 446920	Train
10059	A	Release [TT] (MPU1)Lo_HSC_Tc2HSCBCLOSE_R2		OK		Tshembhani Khosa - 446920	Train
10060	A	Press the button 21S1 to lower pantographs		OK		Tshembhani Khosa - 446920	Train
10061	I	Traction Converter Isolation TC1		OK		Tshembhani Khosa - 446920	Train
10062	A	Switch ON the 3kV DC on the catenary		OK		Tshembhani Khosa - 446920	Train
10063	R	Verify on the line display that the catenary voltage is 3kV DC on the line display where the train is parked		OK		Tshembhani Khosa - 446920	Train
10064	A	Press the button 21S1 to raise pantographs		OK		Tshembhani Khosa - 446920	Train
10065	A	Press the button 22S11 to close HSCBs		OK		Tshembhani Khosa - 446920	Train
10066	R	Button lamp 22S11 is ON		OK		Tshembhani Khosa - 446920	Train
10067	R	Read Defined Variable [TT] (MPU1)lo_hsc_tc1closehscbpbr1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10068	R	Read Defined Variable [TT] (MPU1)lo_hsc_tc2closehscbpbr1 = 0.0		OK	0	Tshembhani Khosa - 446920	Train

10069	R	Read Defined Variable [TT] (MPU1)li_hsc_tc1tbcubypassm12 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10070	R	Read Defined Variable [TT] (MPU1)li_hsc_tc1tbcubypassm34 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10071	R	Read Defined Variable [TT] (MPU1)li_hsc_tc2tbcubypassm12 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10072	R	Read Defined Variable [TT] (MPU1)li_hsc_tc2tbcubypassm34 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10073	R	Read Defined Variable [TT] (MPU1)hsc_tbcu1bypass = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10074	R	Read Defined Variable [TT] (MPU1)hsc_tbcu2bypass = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10075	R	Read Defined Variable [TT] (MPU1)hsc_tbcu3bypass = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10076	R	Read Defined Variable [TT] (MPU1)hsc_tbcu4bypass = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10077	A	Put the Traction converter isolation switch 22S1 to ISOLATION M1/M2		OK		Tshembhani Khosa - 446920	Train
10078	R	Read Defined Variable [TT] (MPU1)li_hsc_tc1tbcubypassm12 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10079	R	Read Defined Variable [TT] (MPU1)hsc_tbcu1bypass = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10080	R	Read Defined Variable [TT] (MPU1)hsc_tbcu4bypass = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10081	R	Read Defined Variable [TT] (MPU1)li_hsc_tc1tbcubypassm34 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10082	R	Read Defined Variable [TT] (MPU1)hsc_tbcu2bypass = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10083	R	Read Defined Variable [TT] (MPU1)hsc_tbcu3bypass = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10084	R	Read Defined Variable [TT] (MPU1)lo_hsc_tc1closehscbr2 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10085	R	Read Defined Variable [TT] (MPU1)lo_hsc_tc2closehscbr2 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10086	A	Press the button 22S11 to close HSCB		OK		Tshembhani Khosa - 446920	Train

10087	A	Both HSCBs are closed		OK		Tshembhani Khosa - 446920	Train
10088	A	Put the Traction converter isolation switch 22S1 to NORMAL position		OK		Tshembhani Khosa - 446920	Train
10089	A	Open HSCBs		OK		Tshembhani Khosa - 446920	Train
10090	A	Press the virtual button RESET TRACTION FAULTS on the DDU maintenance screen		OK		Tshembhani Khosa - 446920	Train
10091	A	Press the button 22S11 to close HSCB		OK		Tshembhani Khosa - 446920	Train
10092	A	Put the Traction converter isolation switch 22S1 to ISOLATION M3/M4		OK		Tshembhani Khosa - 446920	Train
10093	R	Read Defined Variable [TT] (MPU1)li_hsc_tc1tbcubypassm12 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10094	R	Read Defined Variable [TT] (MPU1)li_hsc_tc1tbcubypassm34 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10095	R	Read Defined Variable [TT] (MPU1)hsc_tbcu1bypass = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10096	R	Read Defined Variable [TT] (MPU1)hsc_tbcu4bypass = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10097	R	Read Defined Variable [TT] (MPU1)hsc_tbcu3bypass = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10098	R	Read Defined Variable [TT] (MPU1)hsc_tbcu2bypass = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10099	R	Read Defined Variable [TT] (MPU1)lo_hsc_tc1closehscbr2 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10100	R	Read Defined Variable [TT] (MPU1)lo_hsc_tc2closehscbr2 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10101	A	Press the button 22S11 to close HSCB		OK		Tshembhani Khosa - 446920	Train
10102	A	Both HSCBs are closed		OK		Tshembhani Khosa - 446920	Train
10103	A	Put the Traction converter isolation switch 22S1 to NORMAL position		OK		Tshembhani Khosa - 446920	Train
10104	A	Open HSCBs		OK		Tshembhani Khosa - 446920	Train
10105	A	Press the virtual button RESET TRACTION FAULTS on the DDU maintenance screen		OK		Tshembhani Khosa - 446920	Train

10106	A	Press the button 22S11 to close HSCB		OK		Tshembhani Khosa - 446920	Train
10107	A	Put the Traction converter isolation switch 22S1 to ISOLATION M1+M3/M2+M4		OK		Tshembhani Khosa - 446920	Train
10108	R	Read Defined Variable [TT] (MPU1)li_hsc_tc1tbcubypassm12 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10109	R	Read Defined Variable [TT] (MPU1)li_hsc_tc1tbcubypassm34 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10110	R	Read Defined Variable [TT] (MPU1)hsc_tbcu1bypass = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10111	R	Read Defined Variable [TT] (MPU1)hsc_tbcu2bypass = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10112	R	Read Defined Variable [TT] (MPU1)hsc_tbcu3bypass = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10113	R	Read Defined Variable [TT] (MPU1)hsc_tbcu4bypass = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10114	R	Read Defined Variable [TT] (MPU1)li_hsc_m1hscbopenr1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10115	R	Read Defined Variable [TT] (MPU1)li_hsc_m2hscbopenr1 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10116	A	Put the Traction converter isolation switch 22S1 to NORMAL position		OK		Tshembhani Khosa - 446920	Train
10117	A	Press the button 22S11 to close HSCB		OK		Tshembhani Khosa - 446920	Train
10118	A	Press the virtual button RESET TRACTION FAULTS on the DDU maintenance screen		OK		Tshembhani Khosa - 446920	Train
10119	R	All Traction units are in service and operational		OK		Tshembhani Khosa - 446920	Train
10120	A	Press the button 22S12 to open the HSCBs		OK		Tshembhani Khosa - 446920	Train
10121	R	Read Defined Variable [TT] (MPU1)li_hsc_m1hscbopenr2 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10122	R	Read Defined Variable [TT] (MPU1)li_hsc_m2hscbopenr1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10123	A	Press the button 21S1 to lower both pantographs		OK		Tshembhani Khosa - 446920	Train

10124	R	Read Defined Variable [TT] PNT_AllPantoRaised = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10125	A	Remove active cab on TC1		OK		Tshembhani Khosa - 446920	Train
10126	I	HSCB Operation with High Voltage		OK		Tshembhani Khosa - 446920	Train
10127	A	Active Cab on TC2		OK		Tshembhani Khosa - 446920	Train
10128	A	Press the button 21S1 to raise both pantographs		OK		Tshembhani Khosa - 446920	Train
10129	R	Both pantographs are raised successfully		OK		Tshembhani Khosa - 446920	Train
10130	R	The voltage on the Line Voltage Indicator module is at least 2.7 kV DC		OK		Tshembhani Khosa - 446920	Train
10131	A	Press the button 22S11 to close HSCBs		OK		Tshembhani Khosa - 446920	Train
10132	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1contactopen400r2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10133	R	Read Defined Variable [TT] (MPU1)li_nrg_tc2contactopen400r2___1 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10134	R	Read Defined Variable [TT] (MPU1)TBCU1_LI_HSCB_CL = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10135	R	Read Defined Variable [TT] (MPU1)tbcu2_li_hscb_cl = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10136	R	Read Defined Variable [TT] (MPU1)tbcu3_li_hscb_cl = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10137	R	Read Defined Variable [TT] (MPU1)tbcu4_li_hscb_cl = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10138	R	Read Defined Variable [TT] (MPU1)TBCU1_LI_HSCB_HOLD = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10139	R	Read Defined Variable [TT] (MPU1)tbcu2_li_hscb_hold = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10140	R	Read Defined Variable [TT] (MPU1)tbcu3_li_hscb_hold = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10141	R	Read Defined Variable [TT] (MPU1)tbcu4_li_hscb_hold = 1.0		OK	1	Celiwe Sokhela - 491462	Train

10142	R	Read Defined Variable [TT] (MPU1)TBCU1_LI_HSCB_OP = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10143	R	Read Defined Variable [TT] (MPU1)tbcu2_li_hscb_op = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10144	R	Read Defined Variable [TT] (MPU1)tbcu3_li_hscb_op = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10145	R	Read Defined Variable [TT] (MPU1)tbcu4_li_hscb_op = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10146	I	Traction Converter Isolation TC2		OK		Tshembhani Khosa - 446920	Train
10147	R	Read Defined Variable [TT] (MPU1)lo_hsc_tc1closehscbpbr1 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10148	R	Read Defined Variable [TT] (MPU1)lo_hsc_tc2closehscbpbr1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10149	R	Read Defined Variable [TT] (MPU1)li_hsc_tc1tbcubypassm12 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10150	R	Read Defined Variable [TT] (MPU1)li_hsc_tc1tbcubypassm34 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10151	R	Read Defined Variable [TT] (MPU1)li_hsc_tc2tbcubypassm12 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10152	R	Read Defined Variable [TT] (MPU1)li_hsc_tc2tbcubypassm34 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10153	R	Read Defined Variable [TT] (MPU1)hsc_tbcu1bypass = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10154	R	Read Defined Variable [TT] (MPU1)hsc_tbcu2bypass = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10155	R	Read Defined Variable [TT] (MPU1)hsc_tbcu3bypass = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10156	R	Read Defined Variable [TT] (MPU1)hsc_tbcu4bypass = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10157	R	Read Defined Variable [TT] (MPU1)li_hsc_tc2tbcubypassm34 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10158	A	Put the Traction converter isolation switch 22S1 to ISOLATION M1/M2		OK		Tshembhani Khosa - 446920	Train
10159	R	Read Defined Variable [TT] (MPU1)li_hsc_tc2tbcubypassm12 = 1.0		OK	1	Tshembhani Khosa - 446920	Train

10160	R	Read Defined Variable [TT] (MPU1)hsc_tbcu2bypass = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10161	R	Read Defined Variable [TT] (MPU1)hsc_tbcu3bypass = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10162	R	Read Defined Variable [TT] (MPU1)hsc_tbcu4bypass = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10163	R	Read Defined Variable [TT] (MPU1)lo_hsc_tc1closehscbr2 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10164	R	Read Defined Variable [TT] (MPU1)lo_hsc_tc2closehscbr2 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10165	A	Press the button 22S11 to close HSCB		OK		Tshembhani Khosa - 446920	Train
10166	A	Both HSCBs are closed		OK		Tshembhani Khosa - 446920	Train
10167	A	Put the Traction converter isolation switch 22S1 to NORMAL position		OK		Tshembhani Khosa - 446920	Train
10168	A	Open HSCBs		OK		Tshembhani Khosa - 446920	Train
10169	A	Press the virtual button RESET TRACTION FAULTS on the DDU maintenance screen		OK		Tshembhani Khosa - 446920	Train
10170	A	Press the button 22S11 to close HSCB		OK		Tshembhani Khosa - 446920	Train
10171	A	Put the Traction converter isolation switch 22S1 to ISOLATION M3/M4		OK		Tshembhani Khosa - 446920	Train
10172	R	Read Defined Variable [TT] (MPU1)li_hsc_tc2tbcubypassm12 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10173	R	Read Defined Variable [TT] (MPU1)li_hsc_tc2tbcubypassm34 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10174	R	Read Defined Variable [TT] (MPU1)hsc_tbcu1bypass = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10175	R	Read Defined Variable [TT] (MPU1)hsc_tbcu2bypass = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10176	R	Read Defined Variable [TT] (MPU1)hsc_tbcu3bypass = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10177	R	Read Defined Variable [TT] (MPU1)hsc_tbcu4bypass = 0.0		OK	0	Tshembhani Khosa - 446920	Train

10178	R	Read Defined Variable [TT] (MPU1)lo_hsc_tc1closehscbr2 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10179	R	Read Defined Variable [TT] (MPU1)lo_hsc_tc2closehscbr2 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10180	A	Press the button 22S11 to close HSCB		OK		Tshembhani Khosa - 446920	Train
10181	A	Both HSCBs are closed		OK		Tshembhani Khosa - 446920	Train
10182	A	Put the Traction converter isolation switch 22S1 to NORMAL position		OK		Tshembhani Khosa - 446920	Train
10183	A	Open HSCBs		OK		Tshembhani Khosa - 446920	Train
10184	A	Press the virtual button RESET TRACTION FAULTS on the DDU maintenance screen		OK		Tshembhani Khosa - 446920	Train
10185	A	Press the button 22S11 to close HSCB		OK		Tshembhani Khosa - 446920	Train
10186	A	Put the Traction converter isolation switch 22S1 to ISOLATION M1+M3/M2+M4		OK		Tshembhani Khosa - 446920	Train
10187	R	Read Defined Variable [TT] (MPU1)li_hsc_tc2tbcubypassm12 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10188	R	Read Defined Variable [TT] (MPU1)li_hsc_tc2tbcubypassm34 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10189	R	Read Defined Variable [TT] (MPU1)hsc_tbcu1bypass = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10190	R	Read Defined Variable [TT] (MPU1)hsc_tbcu2bypass = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10191	R	Read Defined Variable [TT] (MPU1)hsc_tbcu3bypass = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10192	R	Read Defined Variable [TT] (MPU1)hsc_tbcu4bypass = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10193	R	Read Defined Variable [TT] (MPU1)lo_hsc_tc1closehscbr2 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10194	R	Read Defined Variable [TT] (MPU1)lo_hsc_tc2closehscbr2 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10195	A	Put the Traction converter isolation switch 22S1 to NORMAL position		OK		Tshembhani Khosa - 446920	Train

10196	A	Press the virtual button RESET TRACTION FAULTS on the DDU maintenance screen		OK		Tshembhani Khosa - 446920	Train
10197	A	Press the button 22S11 to close HSCB		OK		Tshembhani Khosa - 446920	Train
10198	R	All Traction units are in service and operational		OK		Tshembhani Khosa - 446920	Train
10199	I	End of test		OK		Tshembhani Khosa - 446920	Train

Section 3 – Energy Distribution 400V AC

3.3 Instructions list

3.3.1 014_NRG-Energy Distribution 400V AC

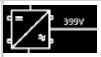
I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	Auxiliary Converters Command=SPP 018		OK		Tebogo Mtombeni - 529938	Train
10002	I	Initial Conditions		OK		Tebogo Mtombeni - 529938	Train
10003	I	TCMS should be working on train		OK		Tebogo Mtombeni - 529938	Train
10004	I	No high voltage present on catenary		OK		Tebogo Mtombeni - 529938	Train
10005	I	Start of Test		OK		Tebogo Mtombeni - 529938	Train
10006	A	Activate the Cab on TC2		OK		Tebogo Mtombeni - 529938	Train
10007	A	Close the battery contactor 18S1		OK		Tebogo Mtombeni - 529938	Train
10008	I	Wait for the TCMS to successfully initialize, then do the steps below		OK		Tebogo Mtombeni - 529938	Train
10009	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1battcontactclosedr1___1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10010	R	Read Defined Variable [TT] (MPU1)lo_nrg_tc1batteryconnectionr1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10011	R	Read Defined Variable [TT] (MPU1)li_nrg_tc2battcontactclosedr2___1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10012	R	Read Defined Variable [TT] (MPU1)lo_nrg_tc2batteryconnectionr2 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10013	A	Trip the Circuit Breaker CC(ALS) on TC2 CVS AGATE compartment		OK		Tebogo Mtombeni - 529938	Train
10014	R	Read Defined Variable [TT] (MPU1)li_nrg_tc2battcontactclosedr1___1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10015	R	Read Defined Variable [TT] (MPU1)li_nrg_tc2battcontactclosedr2___1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train

10016	R	Read Defined Variable [TT] (MPU1)Li_NRG_Tc2DcDcGateDriveR1___1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10017	R	Read Defined Variable [TT] (MPU1)Li_NRG_Tc2DcDcGateDriveR2___1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10018	I	Wait for 30s timer in the next step prior to resetting Circuit Breaker CC(ALS)		OK		Tebogo Mtombeni - 529938	Train
10019	A	Timer 30.0 S		OK		Tebogo Mtombeni - 529938	Train
10020	A	Reset the Circuit Breaker CC(ALS) on TC2 CVS AGATE compartment		OK		Tebogo Mtombeni - 529938	Train
10021	A	Trip the Circuit Breaker CC(AL) on TC2 CVS AGATE compartment		OK		Tebogo Mtombeni - 529938	Train
10022	R	Read Defined Variable [TT] (MPU1)Li_NRG_Tc2CcAlAcuStatusR1___1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10023	R	Read Defined Variable [TT] (MPU1)Li_NRG_Tc2CcAlAcuStatusR2___1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10024	I	Wait for 30s timer in the next step prior to resetting Circuit Breaker CC(ALS)		OK		Tebogo Mtombeni - 529938	Train
10025	A	Timer 30.0 S		OK		Tebogo Mtombeni - 529938	Train
10026	A	Reset the Circuit Breaker CC(AL) on TC2 CVS AGATE compartment		OK		Tebogo Mtombeni - 529938	Train
10027	A	Activate the Cab on TC1		OK		Tebogo Mtombeni - 529938	Train
10028	A	Close the battery contactor 18S1		OK		Tebogo Mtombeni - 529938	Train
10029	I	Wait for the TCMS to successfully initialize, then do the steps below		OK		Tebogo Mtombeni - 529938	Train
10030	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1battcontactclosedr1___1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10031	R	Read Defined Variable [TT] (MPU1)lo_nrg_tc1batteryconnectionr1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10032	R	Read Defined Variable [TT]		OK	1	Tebogo Mtombeni - 529938	Train

		(MPU1)li_nrg_tc2battcontactclosedr2___1 = 1.0					
10033	R	Read Defined Variable [TT] (MPU1)lo_nrg_tc2batteryconnectionr2 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10034	A	Trip the Circuit Breaker CC(ALS) on TC1 CVS AGATE compartment		OK		Tebogo Mtombeni - 529938	Train
10035	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1battcontactclosedr1___1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10036	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1battcontactclosedr2___1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10037	R	Read Defined Variable [TT] (MPU1)Li_NRG_Tc1DcDcGateDriveR1___1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10038	R	Read Defined Variable [TT] (MPU1)Li_NRG_Tc1DcDcGateDriveR2___1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10039	I	Wait for 30s timer in the next step prior to resetting Circuit Breaker CC(ALS)		OK		Tebogo Mtombeni - 529938	Train
10040	A	Timer 30.0 S		OK		Tebogo Mtombeni - 529938	Train
10041	A	Reset the Circuit Breaker CC(ALS) on TC1 CVS AGATE compartment		OK		Tebogo Mtombeni - 529938	Train
10042	A	Trip the Circuit Breaker CC(AL) on TC1 CVS AGATE compartment		OK		Tebogo Mtombeni - 529938	Train
10043	R	Read Defined Variable [TT] (MPU1)Li_NRG_Tc1CcAlAcuStatusR1___1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10044	R	Read Defined Variable [TT] (MPU1)Li_NRG_Tc1CcAlAcuStatusR2___1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10045	I	Wait for 30s timer in the next step prior to resetting Circuit Breaker CC(ALS)		OK		Tebogo Mtombeni - 529938	Train
10046	A	Timer 30.0 S		OK		Tebogo Mtombeni - 529938	Train
10047	A	Reset the Circuit Breaker CC(AL) on TC1 CVS AGATE compartment		OK		Tebogo Mtombeni - 529938	Train

10048	I	Automatic Train Preparation & Auxiliary Converter Status		OK		Tebogo Mtombeni - 529938	Train
10049	R	Read Defined Variable [TT] (MPU1)li_cab_tc1automaticstartr1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10050	R	Read Defined Variable [TT] (MPU1)li_cab_tc2automaticstartr2 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10051	A	Force [TT] (MPU1)li_cab_tc1automaticstartr1 = 1.0		OK		Tebogo Mtombeni - 529938	Train
10052	A	Force [TT] (MPU1)li_cab_tc1automaticstartr2 = 1.0		OK		Tebogo Mtombeni - 529938	Train
10053	A	Timer 5.0 S		OK		Tebogo Mtombeni - 529938	Train
10054	R	Read Defined Variable [TT] (MPU1)lo_cab_tc1automaticstartr1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10055	R	Read Defined Variable [TT] (MPU1)lo_cab_tc2automaticstartr2 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10056	R	Read Defined Variable [TT] (MPU1)lo_nrg_tc1converterfaultr2 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10057	R	Lamp 18H1 is ON		OK		Tebogo Mtombeni - 529938	Train
10058	R	The ACU on TC1 and TC2 are not operational, the ACU appears in Grey colour on the DDU maintenance screen		OK		Tebogo Mtombeni - 529938	Train
10059	R	Read Defined Variable [TT] (MPU1)Li_NRG_Tc1CcAlAcuStatusR1___1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10060	R	Read Defined Variable [TT] (MPU1)Li_NRG_Tc2CcAlAcuStatusR1___1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10061	R	Read Defined Variable [TT] (MPU1)Li_NRG_Tc1CcAlAcuStatusR2___1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10062	R	Read Defined Variable [TT] (MPU1)Li_NRG_Tc2CcAlAcuStatusR2___1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10063	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1contactopen400r1___1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train

10064	R	Read Defined Variable [TT] (MPU1)li_nrg_tc2contactopen400r2___1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10065	R	Read Defined Variable [TT] (MPU1)li_pnt_m1pantorisedr1 = 1.0		OK	1	Mvelo Mthembu - 425564	Train
10066	R	Read Defined Variable [TT] (MPU1)li_pnt_m2pantorisedr2 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10067	A	Switch on 3 kV DC on the catenary		OK		Tebogo Mtombeni - 529938	Train
10068	R	Read Defined Variable [TT] (MPU1)lo_hsc_tc1closehscbr1 = 1.0		OK	1	Mvelo Mthembu - 425564	Train
10069	R	Read Defined Variable [TT] (MPU1)lo_hsc_tc2closehscbr1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10070	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1contactopen400r1___1 = 0.0		OK	0	Mvelo Mthembu - 425564	Train
10071	R	Read Defined Variable [TT] (MPU1)li_nrg_tc2contactopen400r2___1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10072	R	Aux with reduced performance, lamp 18H1 is OFF		OK		Tebogo Mtombeni - 529938	Train
10073	R	Read Defined Variable [TT] (MPU1)lo_nrg_tc1converterfaultr2 = 0.0		OK	0	Mvelo Mthembu - 425564	Train
10074	R	Both ACUs are operational		OK		Mvelo Mthembu - 425564	Train
10075	R	Read Defined Variable [TT] (MPU1)Li_NRG_Tc2DcDcGateDriveR1___1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10076	R	Read Defined Variable [TT] (MPU1)Li_NRG_Tc2DcDcGateDriveR2___1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10077	R	Read Defined Variable [TT] (MPU1)Li_NRG_Tc1DcDcGateDriveR1___1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10078	R	Read Defined Variable [TT] (MPU1)Li_NRG_Tc1DcDcGateDriveR2___1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10079	A	Release [TT] (MPU1)li_cab_tc1automaticstartr1		OK		Tebogo Mtombeni - 529938	Train

10080	A	Release [TT] (MPU1)li_cab_tc1automaticstartr2		OK		Tebogo Mtombeni - 529938	Train
10081	I	ACU Isolation and Bypass		OK		Tebogo Mtombeni - 529938	Train
10082	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1acubypassr1___1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10083	R	Read Defined Variable [TT] (MPU1)li_nrg_tc2acubypassr1___1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10084	A	Put the switch 18S3(ACU ISOLATION) to ISOLATION position		OK		Tebogo Mtombeni - 529938	Train
10085	R	Read Defined Variable [TT] (MPU1)lo_nrg_tc1converterfaultr2 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10086	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1acubypassr1___1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10087	R	Read Defined Variable [TT] (MPU1)li_nrg_tc2acubypassr1___1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10088	I	The help contactor closes on M2 car		OK		Tebogo Mtombeni - 529938	Train
10089	R	Read Defined Variable [TT] (MPU1)lo_nrg_m2converterhelpr1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10090	R	Verify that only one ACU is operational on the DDU, and the help contactor is closed		OK		Tebogo Mtombeni - 529938	Train
10091	A	Put the switch 18S3 (ACU ISOLATION) to NORMAL position		OK		Tebogo Mtombeni - 529938	Train
10092	A	Press the button 22S12 to open HSCB		OK		Tebogo Mtombeni - 529938	Train
10093	R	Button lamp 22S12 is ON		OK		Tebogo Mtombeni - 529938	Train
10094	A	Press the button 22S11 to close HSCB		OK		Tebogo Mtombeni - 529938	Train
10095	R	Button lamp 22S12 is OFF		OK		Tebogo Mtombeni - 529938	Train
10096	R	Both ACUs are operational on DDU Driver's screen		OK		Tebogo Mtombeni - 529938	Train
10097	R	Read Defined Variable [TT] (MPU1)lo_nrg_tc1converterfaultr2 = 0.0		OK	0	Mvelo Mthembu - 425564	Train
10098	R	Read Defined Variable [TT] (MPU1)lo_nrg_m2converterhelpr1 = 0.0		OK	0	Mvelo Mthembu - 425564	Train

10099	A	Put the switch 18S3(ACU ISOLATION) to ISOLATION position on TC2		OK		Tebogo Mtombeni - 529938	Train
10100	R	Read Defined Variable [TT] (MPU1)lo_nrg_tc1converterfaultr2 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10101	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1acubypassr1___1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10102	R	Read Defined Variable [TT] (MPU1)li_nrg_tc2acubypassr1___1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10103	I	The help contactor closes on M2 car		OK		Tebogo Mtombeni - 529938	Train
10104	R	Read Defined Variable [TT] (MPU1)lo_nrg_m2converterhelpr2 = 1.0		OK	1	Mvelo Mthembu - 425564	Train
10105	R	Verify that only one ACU is operational on the DDU, and the help contactor is closed		OK		Tebogo Mtombeni - 529938	Train
10106	A	Put the switch 18S3 (ACU ISOLATION) to NORMAL position on TC2		OK		Tebogo Mtombeni - 529938	Train
10107	A	Press the button 22S12 to open HSCB		OK		Tebogo Mtombeni - 529938	Train
10108	A	Press the button 22S11 to close HSCB		OK		Tebogo Mtombeni - 529938	Train
10109	R	Both ACUs are operational on DDU Driver's screen		OK		Tebogo Mtombeni - 529938	Train
10110	R	Read Defined Variable [TT] (MPU1)lo_nrg_tc1converterfaultr2 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10111	R	Read Defined Variable [TT] (MPU1)lo_nrg_m2converterhelpr2 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10112	I	ACU Fault simulation		OK		Tebogo Mtombeni - 529938	Train
10113	A	Inside the ACU, switch off the AGATE by tripping ACU circuit breaker in TC1		OK		Mvelo Mthembu - 425564	Train
10114	A	Lamp 18H1 is ON in the alarm module		OK		Mvelo Mthembu - 425564	Train
10115	A	Timer 20.0 S		OK		Tebogo Mtombeni - 529938	Train
10116	R	Read Defined Variable [TT] (MPU1)lo_nrg_m2converterhelpr1 = 1.0		OK	1	Mvelo Mthembu - 425564	Train
10117	A	Close the ACU AGATE circuit breaker		OK		Mvelo Mthembu - 425564	Train

10118	A	Timer 30.0 S		OK		Mvelo Mthembu - 425564	Train
10119	A	Open HSCB		OK		Tebogo Mtombeni - 529938	Train
10120	R	Read Defined Variable [TT] (MPU1)lo_nrg_m2converterhelpr1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10121	A	Close HSCB		OK		Tebogo Mtombeni - 529938	Train
10122	R	Lamp 18H1 is OFF in the alarm module		OK		Tebogo Mtombeni - 529938	Train
10123	A	Inside the ACU, switch off the AGATE by tripping ACU circuit breaker in TC2		OK		Tebogo Mtombeni - 529938	Train
10124	A	Lamp 18H1 is ON in the alarm module		OK		Tebogo Mtombeni - 529938	Train
10125	A	Timer 20.0 S		OK		Tebogo Mtombeni - 529938	Train
10126	A	Close the ACU AGATE circuit breaker		OK		Tebogo Mtombeni - 529938	Train
10127	A	Timer 30.0 S		OK		Tebogo Mtombeni - 529938	Train
10128	A	Open HSCB		OK		Tebogo Mtombeni - 529938	Train
10129	A	Close HSCB		OK		Tebogo Mtombeni - 529938	Train
10130	I	Verifying Aux Converter Output		OK		Tebogo Mtombeni - 529938	Train
10131	A	Put the switch 18S3 (ACU ISOLATION) to ISOLATION position on TC1 and TC2		OK		Tebogo Mtombeni - 529938	Train
10132	I	ACU stops working in TC1 and TC2 car		OK		Tebogo Mtombeni - 529938	Train
10133	R	Read Defined Variable [TT] (MPU1)lo_nrg_m2converterhelpr1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10134	R	Lamp 18H1 is ON in the alarm module		OK		Tebogo Mtombeni - 529938	Train
10135	I	This test is performed to verify that the ACUs can supply all the loads without tripping		OK		Tebogo Mtombeni - 529938	Train
10136	A	Open the circuit breaker 19Q2 on TC1		OK		Mvelo Mthembu - 425564	Train
10137	A	Open the circuit breaker 57Q1 for all HVAC units		OK		Mvelo Mthembu - 425564	Train
10138	A	Open the circuit breaker 19Q2 TC2		OK		Mvelo Mthembu - 425564	Train

10139	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cb400distrib = 0.0		OK	0	Mvelo Mthembu - 425564	Train
10140	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cb400distrib = 0.0		OK	0	Mvelo Mthembu - 425564	Train
10141	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cb400distrib = 0.0		OK	0	Mvelo Mthembu - 425564	Train
10142	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cb400distrib = 0.0		OK	0	Mvelo Mthembu - 425564	Train
10143	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cb400distrib = 0.0		OK	0	Mvelo Mthembu - 425564	Train
10144	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cb400distrib = 0.0		OK	0	Mvelo Mthembu - 425564	Train
10145	R	Read Defined Variable [TT] (MPU1)li_air_tc1mcbcompressor = 0.0		OK	0	Mvelo Mthembu - 425564	Train
10146	R	Read Defined Variable [TT] (MPU1)li_air_tc2mcbcompressor = 0.0		OK	0	Mvelo Mthembu - 425564	Train
10147	A	Put the switch 18S3 (ACU ISOLATION) to NORMAL position on TC1 and TC2		OK		Mvelo Mthembu - 425564	Train
10148	I	ACU starts working on TC1 and TC2		OK		Mvelo Mthembu - 425564	Train
10149	A	Close the circuit breaker 19Q2 TC1		OK		Mvelo Mthembu - 425564	Train
10150	A	Close the circuit breaker 57Q1 for all HVAC units		OK		Mvelo Mthembu - 425564	Train
10151	I	It is necessary to check on the DDU screen for HVAC status		OK		Mvelo Mthembu - 425564	Train
10152	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cb400distrib = 1.0		OK	1	Mvelo Mthembu - 425564	Train
10153	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cb400distrib = 1.0		OK	1	Mvelo Mthembu - 425564	Train
10154	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cb400distrib = 1.0		OK	1	Mvelo Mthembu - 425564	Train
10155	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cb400distrib = 1.0		OK	1	Mvelo Mthembu - 425564	Train
10156	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cb400distrib = 1.0		OK	1	Mvelo Mthembu - 425564	Train

10157	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cb400distrib = 1.0		OK	1	Mvelo Mthembu - 425564	Train
10158	A	Close the circuit breaker 19Q2 TC2		OK		Mvelo Mthembu - 425564	Train
10159	R	Read Defined Variable [TT] (MPU1)li_air_tc1mcbcompressor = 1.0		OK	1	Mvelo Mthembu - 425564	Train
10160	R	Read Defined Variable [TT] (MPU1)li_air_tc2mcbcompressor = 1.0		OK	1	Mvelo Mthembu - 425564	Train
10161	R	Verify the circuit breaker 18Q2 ACU on TC1 and TC2 have not tripped		OK		Mvelo Mthembu - 425564	Train
10162	A	Release [TT] (MPU1)lo_cab_tc1automaticstartr1		OK		Mvelo Mthembu - 425564	Train
10163	A	Release [TT] (MPU1)lo_cab_tc1automaticstartr2		OK		Mvelo Mthembu - 425564	Train
10164	I	Shore supply 400Vac		OK		Mvelo Mthembu - 425564	Train
10165	I	This test is to verify if the Aux converters are able to start-up successfully under external power supply and also charge the batteries without 3kV DC from the catenary.		OK		Tebogo Mtombeni - 529938	Train
10166	I	The shore supply used should be limited to 63A at 400Vac, 50Hz, three phase. A neutral on the shore supply is mandatory.		OK		Tebogo Mtombeni - 529938	Train
10167	A	Press the button 22S12 to open the HSCB		OK		Tebogo Mtombeni - 529938	Train
10168	A	Press switch 21S1 to lower both pantographs		OK		Tebogo Mtombeni - 529938	Train
10169	R	Read Defined Variable [TT] (MPU1)li_pnt_m1pantorisedr1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10170	R	Read Defined Variable [TT] (MPU1)li_pnt_m2pantorisedr2 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10171	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1shoresupply__1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10172	R	Read Defined Variable [TT] (MPU1)li_nrg_tc2shoresupply__1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10173	A	Connect the shore supply on TC1 ACU		OK		Tebogo Mtombeni - 529938	Train

10174	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1shoresupply__1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10175	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1contactopen400r2 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10176	R	Read Defined Variable [TT] (MPU1)li_nrg_tc2shoresupply__1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10177	R	Read Defined Variable [TT] (MPU1)li_nrg_tc2contactopen400r1__1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10178	A	Press switch 21S1 to raise both pantographs		OK		Tebogo Mtombeni - 529938	Train
10179	A	Close HSCB using the button 22S11		OK		Tebogo Mtombeni - 529938	Train
10180	I	It is not possible to close HSCB with shore supply connected		OK		Tebogo Mtombeni - 529938	Train
10181	R	Read Defined Variable [TT] (MPU1)lo_hsc_tc1closehscbpbr1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10182	A	Remove shore supply from TC1 ACU		OK		Tebogo Mtombeni - 529938	Train
10183	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1shoresupply__1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10184	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1contactopen400r2 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10185	R	Read Defined Variable [TT] (MPU1)li_nrg_tc2shoresupply__1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10186	R	Read Defined Variable [TT] (MPU1)li_nrg_tc2contactopen400r1__1 = 1.0		OK	1	Mvelo Mthembu - 425564	Train
10187	A	Connect the shore supply on TC2 ACU		OK		Tebogo Mtombeni - 529938	Train
10188	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1shoresupply__1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10189	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1contactopen400r2 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10190	R	Read Defined Variable [TT] (MPU1)li_nrg_tc2shoresupply__1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10191	R	Read Defined Variable [TT]		OK	0	Tebogo Mtombeni - 529938	Train

		(MPU1)li_nrg_tc2contactopen400r2___1 = 0.0					
10192	A	Close HSCB using the button 22S11		OK		Tebogo Mtombeni - 529938	Train
10193	I	It is not possible to close HSCB with shore supply connected		OK		Tebogo Mtombeni - 529938	Train
10194	R	Read Defined Variable [TT] (MPU1)li_hsc_tc1hscbclosepbr1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10195	A	Remove shore supply from TC2 ACU		OK		Tebogo Mtombeni - 529938	Train
10196	I	Shore Supply with 3kV present		OK		Tebogo Mtombeni - 529938	Train
10197	I	The system should be able to prevent the 400Vac contactor of the ACU from closing when 3 kV from the catenary is available and shore supply is connected.		OK		Tebogo Mtombeni - 529938	Train
10198	A	Close HSCB using the button 22S11		OK		Tebogo Mtombeni - 529938	Train
10199	R	Read Defined Variable [TT] (MPU1)li_hsc_tc1hscbclosepbr1 = 1.0		OK	1	Mvelo Mthembu - 425564	Train
10200	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1contactopen400r1___1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10201	R	Read Defined Variable [TT] (MPU1)li_nrg_tc2contactopen400r1___1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10202	A	Connect the shore supply on TC1 ACU		OK		Tebogo Mtombeni - 529938	Train
10203	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1contactopen400r1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10204	R	Read Defined Variable [TT] (MPU1)li_nrg_tc2contactopen400r2___1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10205	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1shoresupply___1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10206	R	Read Defined Variable [TT] (MPU1)li_nrg_tc2shoresupply___1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10207	A	Force [TT] (MPU1)li_nrg_tc1shoresupply___1 = 1.0		OK		Tebogo Mtombeni - 529938	Train

10208	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1contactopen400r1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10209	R	Read Defined Variable [TT] (MPU1)li_nrg_tc2contactopen400r2___1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10210	R	The HSCBs open		OK		Tebogo Mtombeni - 529938	Train
10211	A	Release [TT] (MPU1)li_nrg_tc1shoresupply___1		OK		Tebogo Mtombeni - 529938	Train
10212	A	Remove shore supply from TC1 ACU		OK		Tebogo Mtombeni - 529938	Train
10213	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1contactopen400r1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10214	R	Read Defined Variable [TT] (MPU1)li_nrg_tc2contactopen400r1___1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10215	A	Close HSCB using the button 22S11		OK		Tebogo Mtombeni - 529938	Train
10216	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1contactopen400r1___1 = 0.0		OK	0	Mvelo Mthembu - 425564	Train
10217	R	Read Defined Variable [TT] (MPU1)li_nrg_tc2contactopen400r1___1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10218	A	Connect the shore supply on TC2 ACU		OK		Tebogo Mtombeni - 529938	Train
10219	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1contactopen400r1 = 0.0		OK	0	Mvelo Mthembu - 425564	Train
10220	R	Read Defined Variable [TT] (MPU1)li_nrg_tc2contactopen400r2___1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10221	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1shoresupply___1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10222	R	Read Defined Variable [TT] (MPU1)li_nrg_tc2shoresupply___1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10223	A	Force [TT] (MPU1)li_nrg_tc2shoresupply___1 = 1.0		OK		Tebogo Mtombeni - 529938	Train
10224	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1contactopen400r1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train

10225	R	Read Defined Variable [TT] (MPU1)li_nrg_tc2contactopen400r2___1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10226	R	The HSCBs open		OK		Tebogo Mtombeni - 529938	Train
10227	A	Release [TT] (MPU1)li_nrg_tc2shoresupply___1		OK		Tebogo Mtombeni - 529938	Train
10228	A	Remove shore supply from TC2 ACU		OK		Tebogo Mtombeni - 529938	Train
10229	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1contactopen400r1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10230	R	Read Defined Variable [TT] (MPU1)li_nrg_tc2contactopen400r1___1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10231	A	Close HSCB		OK		Tebogo Mtombeni - 529938	Train
10232	R	Both ACUs are operational		OK		Tebogo Mtombeni - 529938	Train
10233	I	ACU reverse mode		OK		Tebogo Mtombeni - 529938	Train
10234	A	Open HSCB		OK		Tebogo Mtombeni - 529938	Train
10235	R	Verify on the DDU that the HSCB is open on M1 and M2		OK		Tebogo Mtombeni - 529938	Train
10236	R	Verify on the DDU that all HVACs are only operating in Ventilation mode		OK		Tebogo Mtombeni - 529938	Train
10237	R	Verify on the DDU that both CVS are operating in reverse mode		OK		Tebogo Mtombeni - 529938	Train
10238	R	Verify on the DDU that both MASU are not running		OK		Tebogo Mtombeni - 529938	Train
10239	A	Switch ON the 3kV DC on the catenary		OK		Tebogo Mtombeni - 529938	Train
10240	A	Close HSCB using button 22S11		OK		Tebogo Mtombeni - 529938	Train
10241	R	Line voltage indicator shows at least 2.7kV DC		OK		Tebogo Mtombeni - 529938	Train
10242	R	Verify on the DDU that the HSCB is closed on M1 and M2		OK		Tebogo Mtombeni - 529938	Train
10243	R	Verify on the DDU that all HVACs are operating under normal condition		OK		Tebogo Mtombeni - 529938	Train

10244	I	Automatic Train De-preparation & Auxiliary Converter status TC2		OK		Tebogo Mtombeni - 529938	Train
10245	A	Press the Automatic start button 20S1 on the Driver's Desk or Virtual button on DDU screen		OK		Tebogo Mtombeni - 529938	Train
10246	R	Read Defined Variable [TT] (MPU1)li_cab_tc1automaticstartr2 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10247	R	Read Defined Variable [TT] (MPU1)li_cab_tc2automaticstartr1 = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10248	R	Read Defined Variable [TT] PNT_AllPantoRaised = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10249	R	Read Defined Variable [TT] HSC_HscbClosedNum = 0.0		OK	0	Tebogo Mtombeni - 529938	Train
10250	R	Train is in LV ready		OK		Tebogo Mtombeni - 529938	Train
10251	I	Automatic train preparation and de-preparation on TC2		OK		Tebogo Mtombeni - 529938	Train
10252	A	Insert the Driver's master key on TC2 and turn it to ON position		OK		Tebogo Mtombeni - 529938	Train
10253	A	Close the battery contactor 18S1		OK		Tebogo Mtombeni - 529938	Train
10254	A	After the TCMS successful initialization, press the automatic start button 20S1		OK		Tebogo Mtombeni - 529938	Train
10255	R	Train is prepared in high voltage		OK		Tebogo Mtombeni - 529938	Train
10256	A	Press the automatic start button 20S1 to de-prepare the train		OK		Tebogo Mtombeni - 529938	Train
10257	R	Train is in LV ready		OK		Tebogo Mtombeni - 529938	Train
10258	A	Open the battery contactor 18S1 to shut down the train		OK		Tebogo Mtombeni - 529938	Train
10259	R	After few seconds, the train is successfully shutdown		OK		Tebogo Mtombeni - 529938	Train
10260	A	Close the battery contactor 18S1		OK		Tebogo Mtombeni - 529938	Train
10261	A	Wait for the TCMS to successfully initialize		OK		Tebogo Mtombeni - 529938	Train
10262	A	Before the PACIS initialize, open, and HOLD the battery contactor 18S1 and read the		OK		Tebogo Mtombeni - 529938	Train

		following:					
10263	R	Read Defined Variable [TT] (MPU1)li_nrg_tc2battoffreqr1___1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10264	R	Read Defined Variable [TT] (MPU1)li_nrg_tc2battoffreqr2___1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10265	A	Release battery contactor 18S1		OK		Tebogo Mtombeni - 529938	Train
10266	A	Once the PACIS has successfully initialized, Open the battery contactor 18S1.		OK		Tebogo Mtombeni - 529938	Train
10267	A	Insert the Driver's master key on TC1 and turn it to ON position		OK		Tebogo Mtombeni - 529938	Train
10268	A	Close the battery contactor 18S1		OK		Tebogo Mtombeni - 529938	Train
10269	A	Wait for the TCMS to successfully initialize		OK		Tebogo Mtombeni - 529938	Train
10270	R	Train is in LV ready		OK		Tebogo Mtombeni - 529938	Train
10271	A	Open the battery contactor 18S1 to shut down the train		OK		Tebogo Mtombeni - 529938	Train
10272	A	Close the battery contactor 18S1		OK		Tebogo Mtombeni - 529938	Train
10273	A	Wait for the TCMS to successfully initialize		OK		Tebogo Mtombeni - 529938	Train
10274	A	Before the PACIS initialize, open, and HOLD the battery contactor 18S1 and read the following:		OK		Tebogo Mtombeni - 529938	Train
10275	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1battoffreqr1___1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10276	R	Read Defined Variable [TT] (MPU1)li_nrg_tc1battoffreqr2___1 = 1.0		OK	1	Tebogo Mtombeni - 529938	Train
10277	A	Release battery contactor 18S1		OK		Tebogo Mtombeni - 529938	Train
10278	A	Once the PACIS has successfully initialized, Open the battery contactor 18S1.		OK		Tebogo Mtombeni - 529938	Train
10279	I	End of test		OK		Tebogo Mtombeni - 529938	Train

Section 4 – Cabin Control

4.3 Instructions list

4.3.1 020_CAB-Cabin Control

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	Cabin Control SPP=020		OK		Siphesihle Mchunu - 491465	Train
10002	I	Initial Condition		OK		Siphesihle Mchunu - 491465	Train
10003	I	Backup switch should be in Normal Position		OK		Siphesihle Mchunu - 491465	Train
10004	I	Train should be OFF		OK		Siphesihle Mchunu - 491465	Train
10005	I	Start Test		OK		Siphesihle Mchunu - 491465	Train
10006	I	Cab Active TC1		OK		Siphesihle Mchunu - 491465	Train
10007	A	Insert Driver's Master key and turn it to ON position		OK		Siphesihle Mchunu - 491465	Train
10008	A	Close the battery contactor 18S1		OK		Siphesihle Mchunu - 491465	Train
10009	R	Train successfully start up in normal mode		OK		Siphesihle Mchunu - 491465	Train
10010	A	Put the direction selector switch to FORWARD position		OK		Siphesihle Mchunu - 491465	Train
10011	A	Try to put the Driver's master key in OFF position or remove it from the cab		OK		Siphesihle Mchunu - 491465	Train
10012	R	It is not possible to remove or turn the Driver's master key		OK		Siphesihle Mchunu - 491465	Train
10013	A	Put the direction selector switch to NEUTRAL position		OK		Siphesihle Mchunu - 491465	Train
10014	R	Read Defined Variable [TT] (MPU1)li_cab_tc1cabinactiveno = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10015	A	Turn key to non-active cab		OK		Siphesihle Mchunu - 491465	Train
10016	A	Open and close circuit breaker 20Q2		OK		Siphesihle Mchunu - 491465	Train
10017	R	Read Defined Variable [TT] (MPU1)li_cab_tc1masterkey___1 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train

10018	R	Read Defined Variable [TT] (MPU1)li_cab_tc2masterkey___1 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10019	R	Read Defined Variable [TT] (MPU1)li_cab_tc1keyrelayr2 = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10020	R	Read Defined Variable [TT] (MPU1)Li_CAB_Tc1KeyRelayR1 = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10021	R	Read Defined Variable [TT] (MPU1)li_cab_tc1keyrelayr2 = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10022	R	Read Defined Variable [TT] (MPU1)li_cab_tc1cabinactiver1 = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10023	R	Read Defined Variable [TT] (MPU1)li_cab_tc1cabinactiver2 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10024	R	Read Defined Variable [TT] (MPU1)li_cab_tc1cabinactiver3 = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10025	R	Read Defined Variable [TT] (MPU1)Li_CAB_Tc1CabinActiveR4 = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10026	R	Read Defined Variable [TT] (MPU1)Li_CAB_Tc1CabinActiveR5 = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10027	R	Read Defined Variable [TT] (MPU1)Li_CAB_Tc1KeyRelayR3 = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10028	R	Read Defined Variable [TT] (MPU1)Li_CAB_Tc1KeyRelayR4 = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10029	R	Read Defined Variable [TT] (MPU1)li_cab_tc1othercabinactive___1 = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10030	R	Read Defined Variable [TT] (MPU1)li_cab_tc2othercabinactive___1 = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10031	A	Active cab on TC1		OK		Siphesihle Mchunu - 491465	Train
10032	R	Read Defined Variable [TT] (MPU1)li_cab_tc1cabinactiveno = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10033	R	Read Defined Variable [TT] (MPU1)li_cab_tc1masterkey___1 = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10034	R	Read Defined Variable [TT] (MPU1)li_cab_tc2masterkey___1 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train

10035	R	Read Defined Variable [TT] (MPU1)Li_CAB_Tc1KeyRelayR1 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10036	R	Read Defined Variable [TT] (MPU1)li_cab_tc1keyrelayr2 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10037	R	Read Defined Variable [TT] (MPU1)Li_CAB_Tc1KeyRelayR3 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10038	R	Read Defined Variable [TT] (MPU1)Li_CAB_Tc1KeyRelayR4 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10039	R	Read Defined Variable [TT] (MPU1)li_cab_tc1cabinactiver1 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10040	R	Read Defined Variable [TT] (MPU1)li_cab_tc1cabinactiver2 = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10041	R	Read Defined Variable [TT] (MPU1)li_cab_tc1cabinactiver3 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10042	R	Read Defined Variable [TT] (MPU1)Li_CAB_Tc1CabinActiveR4 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10043	R	Read Defined Variable [TT] (MPU1)Li_CAB_Tc1CabinActiveR5 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10044	R	Read Defined Variable [TT] (MPU1)li_cab_tc1othercabinactive___1 = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10045	R	Read Defined Variable [TT] (MPU1)li_cab_tc2othercabinactive___1 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10046	I	Train Preparation with Automatic Start button TC1		OK		Siphesihle Mchunu - 491465	Train
10047	R	Read Defined Variable [TT] (MPU1)lo_cab_tc1automaticstartr1 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10048	R	Read Defined Variable [TT] PNT_AllPantoRaised = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10049	R	Read Defined Variable [TT] HSC_HscbClosedNum = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10050	A	Press the automatic start button 20S1		OK		Tshembhani Khosa - 446920	Train
10051	R	Button lamp 20S1 will flash during train preparation and then light steady after preparation process is finish		OK		Tshembhani Khosa - 446920	Train

10052	R	Read Defined Variable [TT] (MPU1)Io_cab_tc1automaticstartr1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10053	R	Read Defined Variable [TT] PNT_AllPantoRaised = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10054	R	Read Defined Variable [TT] HSC_HscbClosedNum = 2.0		OK	2	Celiwe Sokhela - 491462	Train
10055	I	Train De-preparation with Automatic Start button TC1		OK		Siphesihle Mchunu - 491465	Train
10056	A	Press the automatic start button 20S1		OK		Siphesihle Mchunu - 491465	Train
10057	A	Timer 5.0 S		OK		Siphesihle Mchunu - 491465	Train
10058	R	Read Defined Variable [TT] (MPU1)Io_cab_tc1automaticstartr1 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10059	R	Read Defined Variable [TT] PNT_AllPantoRaised = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10060	R	Read Defined Variable [TT] HSC_HscbClosedNum = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10061	A	Remove active cab on TC1		OK		Siphesihle Mchunu - 491465	Train
10062	I	Standby mode TC1		OK		Tshembhani Khosa - 446920	Train
10063	A	Active cab on TC1		OK		Tshembhani Khosa - 446920	Train
10064	A	Press the automatic start button 20S1		OK		Tshembhani Khosa - 446920	Train
10065	A	Remove active Cab on TC1		OK		Tshembhani Khosa - 446920	Train
10066	A	Manually isolate EB on M4 using the pneumatic cock C2.3/1		OK		Tshembhani Khosa - 446920	Train
10067	A	Press the standby mode button 20S2 and maintain it		OK		Walter Sigudla - 486333	Train
10068	A	Manually isolate EB on TC1 using the pneumatic cock C1.3/1		OK		Tshembhani Khosa - 446920	Train
10069	R	The pantograph lower and both HSCB open, then the train shuts down automatically		OK		Tshembhani Khosa - 446920	Train
10070	A	Normalize the cock on M4		OK		Tshembhani Khosa - 446920	Train

10071	A	Normalize the cock on TC1		OK		Tshembhani Khosa - 446920	Train
10072	A	Cab Active TC2		OK		Tshembhani Khosa - 446920	Train
10073	A	Insert Driver's Master Key and turn it to ON position		OK		Siphesihle Mchunu - 491465	Train
10074	A	Put the direction selector switch to FORWARD position		OK		Siphesihle Mchunu - 491465	Train
10075	A	Try to put the Driver's master key in OFF position or remove it from the cab		OK		Siphesihle Mchunu - 491465	Train
10076	R	It is not possible to remove or turn the Driver's master key		OK		Siphesihle Mchunu - 491465	Train
10077	A	Put the direction selector switch to NEUTRAL position		OK		Siphesihle Mchunu - 491465	Train
10078	A	Turn key to non-active cab		OK		Siphesihle Mchunu - 491465	Train
10079	A	Open and close the circuit breaker 20Q2		OK		Siphesihle Mchunu - 491465	Train
10080	R	Read Defined Variable [TT] (MPU1)li_cab_tc2cabinactiveno = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10081	R	Read Defined Variable [TT] (MPU1)li_cab_tc1masterkey___1 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10082	R	Read Defined Variable [TT] (MPU1)li_cab_tc2masterkey___1 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10083	R	Read Defined Variable [TT] (MPU1)li_cab_tc2keyrelayr2___1 = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10084	R	Read Defined Variable [TT] (MPU1)li_cab_tc2keyrelayr1___1 = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10085	R	Read Defined Variable [TT] (MPU1)Li_CAB_Tc2KeyRelayR4 = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10086	R	Read Defined Variable [TT] (MPU1)li_cab_tc2keyrelayr3 = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10087	R	Read Defined Variable [TT] (MPU1)Li_CAB_Tc2CabinActiveR1 = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10088	R	Read Defined Variable [TT] (MPU1)Li_CAB_Tc2CabinActiveR2 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train

10089	R	Read Defined Variable [TT] (MPU1)Li_CAB_Tc2CabinActiveR3 = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10090	R	Read Defined Variable [TT] (MPU1)Li_CAB_Tc2CabinActiveR4 = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10091	R	Read Defined Variable [TT] (MPU1)Li_CAB_Tc2CabinActiveR5 = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10092	R	Read Defined Variable [TT] (MPU1)li_cab_tc1othercabinactive___1 = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10093	R	Read Defined Variable [TT] (MPU1)li_cab_tc2othercabinactive___1 = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10094	R	Read Defined Variable [TT] (MPU1)li_cab_tc1othercabinactive___1 = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10095	A	Active cab on TC2		OK		Siphesihle Mchunu - 491465	Train
10096	R	Read Defined Variable [TT] (MPU1)li_cab_tc1masterkey___1 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10097	R	Read Defined Variable [TT] (MPU1)li_cab_tc2masterkey___1 = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10098	R	Read Defined Variable [TT] (MPU1)li_cab_tc2keyrelayr1___1 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10099	R	Read Defined Variable [TT] (MPU1)li_cab_tc2keyrelayr3 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10100	R	Read Defined Variable [TT] (MPU1)li_cab_tc2keyrelayr2___1 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10101	R	Read Defined Variable [TT] (MPU1)Li_CAB_Tc2KeyRelayR4 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10102	R	Read Defined Variable [TT] (MPU1)Li_CAB_Tc2CabinActiveR1 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10103	R	Read Defined Variable [TT] (MPU1)Li_CAB_Tc2CabinActiveR2 = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10104	R	Read Defined Variable [TT] (MPU1)Li_CAB_Tc2CabinActiveR3 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10105	R	Read Defined Variable [TT] (MPU1)Li_CAB_Tc2CabinActiveR4 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train

10106	R	Read Defined Variable [TT] (MPU1)Li_CAB_Tc2CabinActiveR5 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10107	R	Read Defined Variable [TT] (MPU1)li_cab_tc2cabinactiveno = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10108	R	Read Defined Variable [TT] (MPU1)li_cab_tc1othercabinactive___1 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10109	R	Read Defined Variable [TT] (MPU1)li_cab_tc2othercabinactive___1 = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10110	I	Train Preparation with Automatic Start button TC2		OK		Siphesihle Mchunu - 491465	Train
10111	R	Read Defined Variable [TT] (MPU1)li_cab_tc2automaticstartr1 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10112	R	Read Defined Variable [TT] PNT_AllPantoRaised = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10113	R	Read Defined Variable [TT] HSC_HscbClosedNum = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10114	A	Press the automatic start button 20S1		OK		Tshembhani Khosa - 446920	Train
10115	R	Button lamp 20S1 will flash during train preparation and then light steady after preparation process is finish		OK		Tshembhani Khosa - 446920	Train
10116	R	Read Defined Variable [TT] (MPU1)lo_cab_tc2automaticstartr1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10117	R	Read Defined Variable [TT] PNT_AllPantoRaised = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10118	R	Read Defined Variable [TT] HSC_HscbClosedNum = 2.0		OK	2	Celiwe Sokhela - 491462	Train
10119	I	Train De-preparation with Automatic Start button TC2		OK		Siphesihle Mchunu - 491465	Train
10120	A	Press the automatic start button 20S1		OK		Siphesihle Mchunu - 491465	Train
10121	R	Read Defined Variable [TT] (MPU1)lo_cab_tc2automaticstartr1 = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10122	R	Read Defined Variable [TT] PNT_AllPantoRaised = 0.0		OK	0	Siphesihle Mchunu - 491465	Train

10123	R	Read Defined Variable [TT] HSC_HscbClosedNum = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10124	I	Double Cabin and cabin change		OK		Siphesihle Mchunu - 491465	Train
10125	I	Each cabin must have its own Driver's Master key		OK		Siphesihle Mchunu - 491465	Train
10126	R	Read Defined Variable [TT] (MPU1)li_cab_tc1cabinactiveno = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10127	R	Read Defined Variable [TT] (MPU1)li_cab_tc2cabinactiveno = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10128	A	Remove active cab on TC2		OK		Siphesihle Mchunu - 491465	Train
10129	A	Open and close the circuit breaker 20Q2		OK		Siphesihle Mchunu - 491465	Train
10130	R	Read Defined Variable [TT] (MPU1)li_cab_tc2cabinactiveno = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10131	R	Read Defined Variable [TT] (MPU1)li_cab_tc1cabinactiveno = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10132	A	Activate the cab on TC2		OK		Siphesihle Mchunu - 491465	Train
10133	A	Active cab on TC1		OK		Siphesihle Mchunu - 491465	Train
10134	R	IOS 064 appears on the Driver's event list to notify the driver a second key has been inserted		OK		Siphesihle Mchunu - 491465	Train
10135	R	Read Defined Variable [TT] (MPU1)li_cab_tc1cabinactiveno = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10136	R	Read Defined Variable [TT] (MPU1)li_cab_tc2cabinactiveno = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10137	A	Remove active cab on TC2		OK		Siphesihle Mchunu - 491465	Train
10138	R	Read Defined Variable [TT] (MPU1)li_cab_tc2cabinactiveno = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10139	R	IOS 064 disappears on the Driver's event list to notify the driver a second key has been inserted		OK		Siphesihle Mchunu - 491465	Train
10140	A	Remove active cab from TC1		OK		Siphesihle Mchunu - 491465	Train

10141	R	Read Defined Variable [TT] (MPU1)li_cab_tc1cabinactiveno = 1.0		OK	1	Siphesihle Mchunu - 491465	Train
10142	R	Read Defined Variable [TT] (MPU1)li_cab_tc2cabinactiveno = 0.0		OK	0	Siphesihle Mchunu - 491465	Train
10143	I	Standby mode TC2		OK		Tshembhani Khosa - 446920	Train
10144	A	Active cab on TC2		OK		Tshembhani Khosa - 446920	Train
10145	A	Press the automatic start button 20S1		OK		Tshembhani Khosa - 446920	Train
10146	A	Remove active Cab on TC2		OK		Tshembhani Khosa - 446920	Train
10147	A	Manually isolate EB on M3 using the pneumatic cock C2.3/1		OK		Tshembhani Khosa - 446920	Train
10148	A	Press the standby mode button 20S2 and maintain it		OK		Walter Sigudla - 486333	Train
10149	A	Manually isolate EB on TC2 using the pneumatic cock C1.3/1		OK		Tshembhani Khosa - 446920	Train
10150	R	The pantograph lower and both HSCB open, then the train shuts down automatically		OK		Tshembhani Khosa - 446920	Train
10151	A	Normalize the cock on M3		OK		Tshembhani Khosa - 446920	Train
10152	A	Normalize the cock on TC2		OK		Tshembhani Khosa - 446920	Train
10153	I	End of Test		OK		Tshembhani Khosa - 446920	Train

Section 5 – Computer Network and DDU Screen

5.3 Instructions list

5.3.1 025_NET-Computer Network and DDU Screen

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	Computer Network and DDU Screen = SPP 025		OK		Celiwe Sokhela - 491462	Train
10002	I	TCMS Network Loop		OK		Celiwe Sokhela - 491462	Train
10003	I	This is a reflectometry test to check the TCMS complete loop		OK		Celiwe Sokhela - 491462	Train
10004	I	Please save each result on the Fluke using the cable number given per line		OK		Celiwe Sokhela - 491462	Train
10005	R	There is good connection between CRS1-TC1[25A10] port X4 and CRS1-M1[25A10] port X3 TSX T01 Cable is crossed		OK		Celiwe Sokhela - 491462	Train
10006	R	There is good connection between CRS4-TC1[25A13] port X3 and CRS1-M4[25A10] port X4 TSX T02 Cable is crossed		OK		Celiwe Sokhela - 491462	Train
10007	R	There is good connection between TRS-TC1[25A15] port ETH3 and TBR-M4[25A14] port ETH0 TSX T03 Cable is crossed		OK		Celiwe Sokhela - 491462	Train
10008	R	There is good connection between TBR-TC1 [25A14]ETH1 and TBR-M1[25A14]ETH0 TSX T04 Cable is crossed		OK		Celiwe Sokhela - 491462	Train
10009	R	There is good connection between TBR-M4[25A14]ETH1 and TBR-M2[25A14]ETH1 TSX T05 Cable is crossed		OK		Celiwe Sokhela - 491462	Train
10010	R	There is good connection between CRS2-M4[25A11] port X3 and CRS2-M2[25A11] port X4 TSX T06		OK		Celiwe Sokhela - 491462	Train

		Cable is crossed					
10011	R	There is good connection between CRS2-M1[25A11] port X4 and CRS2-M3[25A11] port X3 TSX T07 Cable is crossed		OK		Celiwe Sokhela - 491462	Train
10012	R	There is good connection between TBR-M1[25A14]ETH1 and TBR-M3 [25A14]ETH1 TSX T08 Cable is crossed		OK		Celiwe Sokhela - 491462	Train
10013	R	There is good connection between CRS1-M2[25A10] port X3 and CRS1-TC2[25A10] port X4 TSX T09 Cable is crossed		OK		Celiwe Sokhela - 491462	Train
10014	R	There is good connection between TBR-M2[25A14]ETH0 and TBR-TC2[25A14]ETH1 TSX T10 Cable is crossed		OK		Celiwe Sokhela - 491462	Train
10015	R	There is good connection between CRS1-M3[25A10] port X4 and CRS3-TC2[25A12] port X3 TSX T11 Cable is crossed		OK		Celiwe Sokhela - 491462	Train
10016	R	There is good connection between TBR-M3[25A14]ETH0 and TRS-TC2[25A15]ETH1 TSX T12 Cable is crossed		OK		Celiwe Sokhela - 491462	Train
10017	I	Pacis Network Loop		OK		Celiwe Sokhela - 491462	Train
10018	R	There is good connection between TRS1-TC1[54A13]ETH7 and CRS1-M4[54A10]port X7 TSX P01 Cable is crossed		OK		Celiwe Sokhela - 491462	Train
10019	R	There is good connection between CRS1-TC1[54A10]port X7 and CRS2-M1[54A11]port X8 TSX P02 Cable is crossed		OK		Celiwe Sokhela - 491462	Train

10020	R	There is good connection between CRS2-M4[54A11]port X8 and CRS1-M2[54A10]port X7 TSX P03 Cable is crossed		OK		Celiwe Sokhela - 491462	Train
10021	R	There is good connection between CRS1-M1[54A10]port X7 and CRS2-M3[54A11]port X8 TSX P04 Cable is crossed		OK		Celiwe Sokhela - 491462	Train
10022	R	There is good connection between CRS2-M2[54A11]port X8 and CRS1-TC2[54A10]port X7 TSX P05 Cable is crossed		OK		Celiwe Sokhela - 491462	Train
10023	R	There is good connection between CRS1-M3[54A10]port X7 and TRS1-TC2[54A13]ETH7 TSX P06 Cable is crossed		OK		Celiwe Sokhela - 491462	Train
10024	A	Download the results from the Fluke into a PDF format and upload it below		OK		Celiwe Sokhela - 491462	Train
10025	I	MCE Redundancy Test		OK		Celiwe Sokhela - 491462	Train
10026	A	Switch ON the train in TC1 in Normal mode		OK		Celiwe Sokhela - 491462	Train
10027	I	MCE in TC1 should be the master MCE to begin the test		OK		Celiwe Sokhela - 491462	Train
10028	R	Read Defined Variable [TT] (MPU1)NET_LocalMceIsMaster = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10029	R	Read Defined Variable [TT] (MPU2)NET_LocalMceIsMaster = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10030	A	Open the circuit breaker 40Q1 in TC1		OK		Celiwe Sokhela - 491462	Train
10031	I	The MCE in TC2 becomes the master MCE		OK		Celiwe Sokhela - 491462	Train
10032	R	Read Defined Variable [TT] (MPU2)NET_LocalMceIsMaster = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10033	A	Close circuit breaker 40Q1 in TC1		OK		Celiwe Sokhela - 491462	Train
10034	A	Open circuit breaker 40Q1 in TC2		OK		Celiwe Sokhela - 491462	Train

10035	I	The MCE in TC1 becomes the Master		OK		Celiwe Sokhela - 491462	Train
10036	R	Read Defined Variable [TT] (MPU1)NET_LocalMceIsMaster = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10037	A	Close the circuit breaker 40Q1 in TC2		OK		Celiwe Sokhela - 491462	Train
10038	R	Read Defined Variable [TT] (MPU1)NET_LocalMceIsMaster = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10039	R	Read Defined Variable [TT] (MPU2)NET_LocalMceIsMaster = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10040	A	Go to software version on DDU and select RUN BL.		OK		Celiwe Sokhela - 491462	Train
10041	R	The Train Baseline is : 1.8/10.1/10.2		OK		Celiwe Sokhela - 491462	Train
10042	I	End of Test		OK		Celiwe Sokhela - 491462	Train

Section 6 – Energy Distribution 110V

6.3 Instructions list

6.3.1 015_NRG-Energy Distribution 110V

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	Energy Distribution 110V DC=SPP 015		OK		Mphato Mphahlele - 480716	Train
10002	I	Initial Conditions		OK		Mphato Mphahlele - 480716	Train
10003	I	Train powered in normal mode with only battery power		OK		Mphato Mphahlele - 480716	Train
10004	A	Activate Cab on TC1		OK		Mphato Mphahlele - 480716	Train
10005	A	Close the battery contactor 18S1		OK		Mphato Mphahlele - 480716	Train
10006	A	Check on the DDU that all devices on TCMS network are in black colour i.e. successfully initialized		OK		Mphato Mphahlele - 480716	Train
10007	R	After few minutes, the TCMS has successfully initialized on the DDU screen		OK		Mphato Mphahlele - 480716	Train
10008	A	Check on the DDU that all devices on TCMS network are in black colour i.e. successfully initialized		OK		Mphato Mphahlele - 480716	Train
10009	R	The Battery Voltage on the Voltage line module is 110V		OK		Mphato Mphahlele - 480716	Train
10010	R	On the Driver Screen, the battery voltage is the same as in the line module (110V)		OK		Mphato Mphahlele - 480716	Train
10011	I	Parameter Update		OK		Walter Sigudla - 486333	Train
10012	A	Perform the following procedure to update the Energy saving parameters		OK		Walter Sigudla - 486333	Train
10013	I	CVS Firmware Update/SW Update		OK		Walter Sigudla - 486333	Train
10014	I	When upgrading the software version ensure that both CVSs are online, and a train does not switch OFF and battery voltage should at least be 97V. Follow the instructions on the attachment for the upgrade in TC1 and TC2		OK		Walter Sigudla - 486333	Train

10015	I	Power supply check for Equipment on Permanent line		OK		Mphato Mphahlele - 480716	Train
10016	R	The emergency Lighting is ON in TC1 saloon, left and right side in low brightness		OK		Mphato Mphahlele - 480716	Train
10017	R	The emergency Lighting is ON in M4 saloon, left and right side in low brightness		OK		Mphato Mphahlele - 480716	Train
10018	R	The emergency Lighting is ON in M1 saloon, left and right side in low brightness		OK		Mphato Mphahlele - 480716	Train
10019	R	The emergency Lighting is ON in M2 saloon, left and right side in low brightness		OK		Mphato Mphahlele - 480716	Train
10020	R	The emergency Lighting is ON in M3 saloon, left and right side in low brightness		OK		Mphato Mphahlele - 480716	Train
10021	R	The emergency Lighting is ON in TC2 saloon, left and right side in low brightness		OK		Mvelo Mthembu - 425564	Train
10022	A	Remove active cab on TC1		OK		Mphato Mphahlele - 480716	Train
10023	I	Train preparation on TC2 cab		OK		Mphato Mphahlele - 480716	Train
10024	A	Insert the Driver's Master key on TC2, turn it to ON position and close battery contactor 18S1		OK		Mphato Mphahlele - 480716	Train
10025	R	The emergency Lighting is ON in TC1 saloon, left and right side in low brightness		OK		Mphato Mphahlele - 480716	Train
10026	R	The emergency Lighting is ON in M4 saloon, left and right side in low brightness		OK		Mphato Mphahlele - 480716	Train
10027	R	The emergency Lighting is ON in M1 saloon, left and right side in low brightness		OK		Mphato Mphahlele - 480716	Train
10028	R	The emergency Lighting is ON in M2 saloon, left and right side in low brightness		OK		Mphato Mphahlele - 480716	Train
10029	R	The emergency Lighting is ON in M3 saloon, left and right side in low		OK		Mphato Mphahlele - 480716	Train

		brightness					
10030	R	The emergency Lighting is ON in TC2 saloon, left and right side in low brightness		OK		Mphato Mphahlele - 480716	Train
10031	A	Shutdown the train by opening the battery contactor 18S1		OK		Mphato Mphahlele - 480716	Train
10032	R	Train is successfully shutdown		OK		Mphato Mphahlele - 480716	Train
10033	I	Battery Low Watchdog		OK		Mphato Mphahlele - 480716	Train
10034	I	This test is to verify that the battery Watchdog relay is working, when the battery voltage drops below 93V DC, the train automatically shutdown		OK		Mphato Mphahlele - 480716	Train
10035	A	On TC2, turn ON the cleaning lights switch 52S6		OK		Mphato Mphahlele - 480716	Train
10036	R	Emergency lighting is ON in all cars		OK		Mphato Mphahlele - 480716	Train
10037	A	Remove the relay 15K1 from its base		OK		Mphato Mphahlele - 480716	Train
10038	R	Emergency lighting is OFF in all cars		OK		Mphato Mphahlele - 480716	Train
10039	A	Put back the relay 15K1 on its base		OK		Mphato Mphahlele - 480716	Train
10040	A	Walk to the TC2 CVS Agate compartment and confirm that the CVS Agate is not powered		OK		Mphato Mphahlele - 480716	Train
10041	R	The CVS Agate is OFF		OK		Mphato Mphahlele - 480716	Train
10042	A	Switch On the train on TC1 side		OK		Mphato Mphahlele - 480716	Train
10043	A	Shutdown the train by opening the battery contactor 18S1		OK		Mphato Mphahlele - 480716	Train
10044	A	Turn the switch 52S6 to switch ON the cleaning lights		OK		Mphato Mphahlele - 480716	Train
10045	A	Remove the relay 15K1 from its base		OK		Mphato Mphahlele - 480716	Train
10046	R	The emergency lighting is OFF in all cars		OK		Mphato Mphahlele - 480716	Train
10047	A	Put back the relay on its base		OK		Mphato Mphahlele - 480716	Train

10048	A	Walk to the TC1 CVS Agate compartment and confirm that the CVS Agate is not powered		OK		Mphato Mphahlele - 480716	Train
10049	R	The CVS Agate is OFF		OK		Mphato Mphahlele - 480716	Train
10050	I	Train Earthing Procedure		OK		Mphato Mphahlele - 480716	Train
10051	R	The train is successfully isolated and earthed.		OK		Mphato Mphahlele - 480716	Train
10052	A	Normalize the train		OK		Mphato Mphahlele - 480716	Train
10053	R	The train is normalized.		OK		Mphato Mphahlele - 480716	Train
10054	R	Check the IOS status to see if both PANTOS are NOT isolated.		OK		Mphato Mphahlele - 480716	Train
10055	I	End of Test		OK		Mphato Mphahlele - 480716	Train

Section 7 – High Voltage Distribution

7.3 Instructions list

7.3.1 010_NRG-High Voltage Distribution

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	Check the power lines, Non-earthed key		OK		Walter Sigudla - 486333	Train
10002	I	For the following tests, the train should not have the presence of high voltage "3KV" For the following tests, the earthing switch of 10A11 boxes must be out of ground position Make sure all power lines not suffer attrition with the rail infrastructure, terminals, resistance and pantographs are fixed with proper torque and there is no tool or material on the roof of the train. At Depot, when it is necessary to access the train roof, person who is responsible for the activity should apply working knowledge in height with appropriate equipment. If there is any change to the train or it's environment this check becomes invalid. Please be sure that the check on the train status is done before reconnecting it.		OK		Walter Sigudla - 486333	Train
10003	A	Apply LOTO procedure on the High Voltage Catenary before commencing with the procedure.		OK		Walter Sigudla - 486333	Train
10004	I	High Voltage Line Continuity Check		OK		Walter Sigudla - 486333	Train
10005	A	Check continuity of the following cables using a long wire, do not short any point to ground.		OK		Walter Sigudla - 486333	Train

10006	A	On TC1 car, from Converter Auxiliary Connector 18XT11 point HV+ cable (#1UP-W_1) to M4 car Propulsion Box Connector 10XT12 point TR1 cable (#1UG-UK_3)		OK		Walter Sigudla - 486333	Train
10007	R	There is continuity. Cables are visually connected, and bolts are torqued.		OK		Walter Sigudla - 486333	Train
10008	A	On M4 car, from Propulsion Box Connector 10XT12 point TR1 cable (#1UG-UK_3) to M1 car High Voltage Box Connector 10XT11_HT1 point 3 cable (#1UM-V_2)		OK		Walter Sigudla - 486333	Train
10009	R	There is continuity. Cables are visually connected, and bolts are torqued.		OK		Walter Sigudla - 486333	Train
10010	A	On M1 car, from Propulsion Box Connector 10XT12 point TR1 cable (#1UG-UK_2) to High Voltage Box Connector 10XT11_HT2 point 1 cable (#1UK-UM_1)		OK		Walter Sigudla - 486333	Train
10011	R	There is continuity. Cables are visually connected, and bolts are torqued.		OK		Walter Sigudla - 486333	Train
10012	A	On M1 car, from Propulsion Box Connector 10XT12 point TR1 cable (#1UG-UK_2) to any Ground Wire		OK		Walter Sigudla - 486333	Train
10013	R	There is NO continuity.		OK		Walter Sigudla - 486333	Train
10014	A	On M2 car, from Propulsion Box Connector 10XT12 point TR1 cable (#1UG-UK_2) to High Voltage Box Connector 10XT11_HT2 point 1 cable (#1UK-UM_1)		OK		Walter Sigudla - 486333	Train
10015	R	There is continuity. Cables are visually connected, and bolts are torqued.		OK		Walter Sigudla - 486333	Train
10016	A	On M2 car, from Propulsion Box Connector 10XT12 point TR1 cable (#1UG-UK_2) to any Ground Wire		OK		Walter Sigudla - 486333	Train
10017	R	There is NO continuity.		OK		Walter Sigudla - 486333	Train
10018	A	On M2 car, from High Voltage Box Connector 10XT11_HT1 point 3 cable (#1UM-V_2) to M3 car Propulsion Box Connector 10XT12 point TR1 cable (#1UG-UK_3)		OK		Walter Sigudla - 486333	Train

10019	R	There is continuity. Cables are visually connected, and bolts are torqued.		OK		Walter Sigudla - 486333	Train
10020	A	On M3 car, From Propulsion Box Connector 10XT12 point TR1 cable (#1UG-UK_3) to TC2 car Converter Auxiliary Connector 18XT11 point HV+ cable (#1UP-W_1)		OK		Walter Sigudla - 486333	Train
10021	R	There is continuity. Cables are visually connected, and bolts are torqued.		OK		Walter Sigudla - 486333	Train
10022	A	Put back all the removed covers and tighten		OK		Walter Sigudla - 486333	Train
10023	R	All covers are back and normalized		OK		Walter Sigudla - 486333	Train
10024	I	End of Test		OK		Walter Sigudla - 486333	Train

Section 8 – Internal Lighting

8.3 Instructions list

8.3.1 052_LGT-Internal Lighting

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	Internal Lighting = SPP 052		OK		Alleta Sekgololo - 417407	Train
10002	I	Initial Conditions		OK		Alleta Sekgololo - 417407	Train
10003	I	Train should be off		OK		Alleta Sekgololo - 417407	Train
10004	I	Main lighting		OK		Alleta Sekgololo - 417407	Train
10005	A	Press the automatic start button 20S1 to prepare the train in High voltage		OK		Alleta Sekgololo - 417407	Train
10006	I	Main lighting is 100% brightness		OK		Alleta Sekgololo - 417407	Train
10007	R	Main lighting is (ON) on TC1, verify the left and right LEDs are ON in each row in 100% brightness		OK		Alleta Sekgololo - 417407	Train
10008	R	Main lighting is (ON) on M4, verify the left and right LEDs are ON in each row in 100% brightness.		OK		Alleta Sekgololo - 417407	Train
10009	R	Main lighting is (ON) on M1, verify the left and right LEDs are ON in each row in 100% brightness		OK		Alleta Sekgololo - 417407	Train
10010	R	Main lighting is (ON) on M2, verify the left and right LEDs are ON in each row in 100% brightness		OK		Alleta Sekgololo - 417407	Train
10011	R	Main lighting is (ON) on M3, verify the left and right LEDs are ON in each row in 100% brightness		OK		Alleta Sekgololo - 417407	Train
10012	R	Main lighting is (ON) on TC2, verify the left and right LEDs are ON in each row in		OK		Alleta Sekgololo - 417407	Train

		100% brightness					
10013	A	Force [TT] (MPU1)lo_lgt_tc1mainlgtcmd = 0.0		OK		Alleta Sekgololo - 417407	Train
10014	A	Force [TT] (MPU1)lo_lgt_tc2mainlgtcmd = 0.0		OK		Alleta Sekgololo - 417407	Train
10015	R	Emergency lighting is (ON) on TC2, brightness has been reduced to low		OK		Alleta Sekgololo - 417407	Train
10016	R	Emergency lighting is (ON) on M3, brightness has been reduced to low		OK		Alleta Sekgololo - 417407	Train
10017	R	Emergency lighting is (ON) on M2, brightness has been reduced to low		OK		Alleta Sekgololo - 417407	Train
10018	R	Emergency lighting is (ON) on M1, brightness has been reduced to low		OK		Alleta Sekgololo - 417407	Train
10019	R	Emergency lighting is (ON) on M4, brightness has been reduced to low		OK		Alleta Sekgololo - 417407	Train
10020	R	Emergency lighting is (ON) on TC1, brightness has been reduced to low		OK		Alleta Sekgololo - 417407	Train
10021	A	Release [TT] (MPU1)lo_lgt_tc1mainlgtcmd		OK		Alleta Sekgololo - 417407	Train
10022	A	Release [TT] (MPU1)lo_lgt_tc2mainlgtcmd		OK		Alleta Sekgololo - 417407	Train
10023	I	End of Test		OK		Alleta Sekgololo - 417407	Train

Section 9 – Pantograph

9.3 Instructions list

9.3.1 021_PNT-Pantograph

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	Pantograph = SPP 021		OK		Anthonia Mabowa - 494131	Train
10002	I	Initial Conditions		OK		Anthonia Mabowa - 494131	Train
10003	I	Main pipe should be 10bar		OK		Anthonia Mabowa - 494131	Train
10004	I	HSCB is open on M1 and M2 and both pantographs are low		OK		Anthonia Mabowa - 494131	Train
10005	I	Auxiliary Compressor test must be completed in car level prior to performing this test		OK		Anthonia Mabowa - 494131	Train
10006	I	Mechanical pantograph test must be completed prior to performing this test		OK		Anthonia Mabowa - 494131	Train
10007	I	EARTHING SWITCH T1 is in NORMAL Position on M1		OK		Anthonia Mabowa - 494131	Train
10008	I	EARTHING SWITCH T1 is in NORMAL Position on M2		OK		Anthonia Mabowa - 494131	Train
10009	I	HVB1 valve is in NORMAL position on M1		OK		Anthonia Mabowa - 494131	Train
10010	I	HVB1 valve is in NORMAL position on M2		OK		Anthonia Mabowa - 494131	Train
10011	I	Start of Test		OK		Anthonia Mabowa - 494131	Train
10012	A	Active Cab on TC1		OK		Anthonia Mabowa - 494131	Train
10013	I	Main Tank pressure switch		OK		Anthonia Mabowa - 494131	Train
10014	I	Make sure the HSCB is open		OK		Anthonia Mabowa - 494131	Train
10015	A	Empty the main pipe using the cock F2.1/1		OK		Anthonia Mabowa - 494131	Train
10016	A	Connect a manometer on valve K2.8 in M1 and measure the pressure		OK		Anthonia Mabowa - 494131	Train
10017	A	Drain the air in the auxiliary compressor pipe using the valve K2.5 in M1		OK		Anthonia Mabowa - 494131	Train

10018	I	The sensor of the pantograph reservoir should switch when the pressure reaches 5.5 bar(+/- 10%)		OK		Anthonia Mabowa - 494131	Train
10019	A	Normalize the valve K2.5 and wait		OK		Anthonia Mabowa - 494131	Train
10020	R	The auxiliary compressor stops when the pressure reaches 7 bar on K2.8		OK		Anthonia Mabowa - 494131	Train
10021	A	Connect a manometer on valve K2.8 in M2 and measure the pressure		OK		Anthonia Mabowa - 494131	Train
10022	A	Drain the air in the auxiliary compressor pipe using the valve K2.5 in M2 car		OK		Anthonia Mabowa - 494131	Train
10023	I	The sensor of the pantograph reservoir should switch when the pressure reaches 5.5 bar(+/- 10%)		OK		Anthonia Mabowa - 494131	Train
10024	A	Normalize the valve K2.5 and wait		OK		Anthonia Mabowa - 494131	Train
10025	R	The auxiliary compressor stops when the pressure reaches 7 bar on K2.8		OK		Anthonia Mabowa - 494131	Train
10026	A	Normalize the main pipe		OK		Anthonia Mabowa - 494131	Train
10027	A	Close the HSCB		OK		Anthonia Mabowa - 494131	Train
10028	A	Remove the manometer		OK		Anthonia Mabowa - 494131	Train
10029	A	Insert the nozzle of the manometer on M2 without the manometer connected, to drain the air when the auxiliary compressor starts		OK		Anthonia Mabowa - 494131	Train
10030	A	Close the circuit breaker 21Q1 in M2		OK		Anthonia Mabowa - 494131	Train
10031	R	Auxiliary compressor starts working		OK		Anthonia Mabowa - 494131	Train
10032	R	Read Defined Variable [TT] (MPU1)lo_pnt_m1startauxiliarcompr1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10033	R	Read Defined Variable [TT] (MPU1)lo_pnt_m1startauxiliarcompr2 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10034	R	Read Defined Variable [TT] (MPU1)lo_pnt_m2startauxiliarcompr1 = 1.0		OK	1	Anthonia Mabowa - 494131	Train

10035	R	Read Defined Variable [TT] (MPU1)lo_pnt_m2startauxiliarcompr2 = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10036	A	Remove the manometer nozzle on M2		OK		Anthonia Mabowa - 494131	Train
10037	A	Put HVB1 valve in NORMAL position on M2		OK		Anthonia Mabowa - 494131	Train
10038	A	Put the earthing switch in NORMAL position on M2		OK		Anthonia Mabowa - 494131	Train
10039	A	Put HVB1 valve in NORMAL position on M1		OK		Anthonia Mabowa - 494131	Train
10040	A	Put the earthing switch in NORMAL position on M1		OK		Anthonia Mabowa - 494131	Train
10041	I	End of Test		OK		Alleta Sekgololo - 417407	Train

Section 10 – Air Production

10.3 Instructions list

10.3.1 019_AIR-Air Production

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	Air Production = SPP 019		OK		Anthonia Mabowa - 494131	Train
10002	I	Initial Conditions		OK		Anthonia Mabowa - 494131	Train
10003	A	Put the train in LV ready (No High Voltage/No Shore Supply) on TC1 as active cab		OK		Anthonia Mabowa - 494131	Train
10004	A	Drain the air on TC1 main pipe using the cock F2.1/1		OK		Anthonia Mabowa - 494131	Train
10005	R	The pressure gauge of the main pipe is 0 bar		OK		Anthonia Mabowa - 494131	Train
10006	A	Normalise the cock		OK		Anthonia Mabowa - 494131	Train
10007	I	Start of Test		OK		Anthonia Mabowa - 494131	Train
10008	R	Read Defined Variable [TT] (MPU1)air_bcu1airsupplyrunning = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10009	R	Read Defined Variable [TT] (MPU1)air_bcu1airsupplydelay = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10010	A	Open circuit breaker 19Q3 on TC1		OK		Anthonia Mabowa - 494131	Train
10011	R	Read Defined Variable [TT] (MPU1)air_bcu1airsupplyok = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10012	A	Close circuit breaker 19Q3		OK		Anthonia Mabowa - 494131	Train
10013	R	Read Defined Variable [TT] (MPU1)air_bcu1airsupplyok = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10014	A	Open circuit breaker 19Q3 on TC2		OK		Anthonia Mabowa - 494131	Train
10015	R	Read Defined Variable [TT] (MPU1)air_bcu2airsupplyok = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10016	A	Close circuit breaker 19Q3 on TC2		OK		Anthonia Mabowa - 494131	Train

10017	R	Read Defined Variable [TT] (MPU1)air_bcu2airsupplyok = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10018	R	Read Defined Variable [TT] (MPU1)air_bcu2airsupplydelay = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10019	R	Read Defined Variable [TT] (MPU1)air_bcu2airsupplyrunning = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10020	I	Main Compressor operation		OK		Anthonia Mabowa - 494131	Train
10021	A	Press the automatic start button 20S1		OK		Anthonia Mabowa - 494131	Train
10022	I	Both main air compressors start up		OK		Anthonia Mabowa - 494131	Train
10023	R	Read Defined Variable [TT] (MPU1)lo_air_tc1compenabler1 = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10024	R	Read Defined Variable [TT] (MPU1)lo_air_tc1compenabler2 = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10025	R	Read Defined Variable [TT] (MPU1)lo_air_tc2compenabler1 = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10026	R	Read Defined Variable [TT] (MPU1)lo_air_tc2compenabler2 = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10027	R	Read Defined Variable [TT] (MPU1)air_bcu1airsupplyrunning = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10028	R	Read Defined Variable [TT] (MPU1)air_bcu2airsupplyrunning = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10029	I	It is necessary to check main pipe pressure on the pneumatic gauge of TC1 and TC2 individually		OK		Anthonia Mabowa - 494131	Train
10030	A	Wait for 10 minutes, then read the variables below		OK		Anthonia Mabowa - 494131	Train
10031	R	Read Defined Variable [TT] (MPU1)lo_air_tc1compenabler1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10032	R	Read Defined Variable [TT] (MPU1)lo_air_tc1compenabler2 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10033	R	Read Defined Variable [TT] (MPU1)lo_air_tc2compenabler1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10034	R	Read Defined Variable [TT] (MPU1)lo_air_tc2compenabler2 = 0.0		OK	0	Anthonia Mabowa - 494131	Train

10035	R	Read Defined Variable [TT] (MPU1)air_bcu1airsupplyrunning = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10036	R	Read Defined Variable [TT] (MPU1)air_bcu2airsupplyrunning = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10037	A	Force [TT] NET_TraintimeEvenDay = 1.0		OK		Anthonia Mabowa - 494131	Train
10038	A	Drain the air in the main pipe from TC1 side using cock F2.1/1 until the pressure reaches below 8.5 bar		OK		Anthonia Mabowa - 494131	Train
10039	R	Read Defined Variable [TT] (MPU1)lo_air_tc1compenabler2 = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10040	R	Read Defined Variable [TT] (MPU1)lo_air_tc2compenabler1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10041	A	Normalise the cock F2.1/1 and let the compressor runs until it stops		OK		Anthonia Mabowa - 494131	Train
10042	A	Force [TT] NET_TraintimeEvenDay = 0.0		OK		Anthonia Mabowa - 494131	Train
10043	A	Drain the air in the main pipe from TC1 side using cock F2.1/1 until the pressure reaches below 8.5 bar		OK		Anthonia Mabowa - 494131	Train
10044	R	Read Defined Variable [TT] (MPU1)lo_air_tc1compenabler1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10045	R	Read Defined Variable [TT] (MPU1)lo_air_tc2compenabler2 = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10046	I	Compressor Manual Isolation TC1		OK		Anthonia Mabowa - 494131	Train
10047	A	Normalise the cock F2.1/1 and let the compressor runs until it stops		OK		Anthonia Mabowa - 494131	Train
10048	A	Put the pneumatic switch 19S1 to ISOLATION position		OK		Anthonia Mabowa - 494131	Train
10049	R	Read Defined Variable [TT] (MPU1)li_air_tc1condemnedr1 = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10050	R	Read Defined Variable [TT] (MPU1)li_air_tc1condemnedr2 = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10051	R	Read Defined Variable [TT] (MPU1)air_bcu1airsupplyok = 1.0		OK	1	Anthonia Mabowa - 494131	Train

10052	R	Read Defined Variable [TT] (MPU1)air_bcu1airsupplydelay = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10053	A	Put the pneumatic switch 19S1 to NORMAL position		OK		Anthonia Mabowa - 494131	Train
10054	R	Read Defined Variable [TT] (MPU1)li_air_tc1condemnedr1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10055	R	Read Defined Variable [TT] (MPU1)li_air_tc1condemnedr2 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10056	R	Read Defined Variable [TT] (MPU1)air_bcu1airsupplydelay = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10057	R	Read Defined Variable [TT] (MPU1)air_bcu1airsupplyok = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10058	R			OK	982	Anthonia Mabowa - 494131	Train
10059	I	Compressor stops when it reaches 10 bar		OK		Anthonia Mabowa - 494131	Train
10060	R	Read Defined Variable [TT] (MPU1)air_bcu1airsupplyok = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10061	R	Verify that the pressure gauge indicates the correct pressure values, according to the DDU BC: Brake cylinder(yellow indicator) MRP: Main Pipe(Red indicator)		OK		Anthonia Mabowa - 494131	Train
10062	I	Compressor Remote Isolation TC1		OK		Anthonia Mabowa - 494131	Train
10063	R	Read Defined Variable [TT] (MPU1)air_bcu2airsupplydelay = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10064	R	Read Defined Variable [TT] (MPU1)li_air_tc1mcbcompressor = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10065	R	Read Defined Variable [TT] (MPU1)li_air_tc1remotecb = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10066	I	It is important to make sure the main pipe pressure is always below 10 bar for the purpose of this test		OK		Anthonia Mabowa - 494131	Train
10067	A	Release the air in the main pipe until it reaches below 8.5 bar		OK		Anthonia Mabowa - 494131	Train
10068	A	Open circuit breaker 19Q3		OK		Anthonia Mabowa - 494131	Train

10069	R	Read Defined Variable [TT] (MPU1)air_bcu1airsupplyrunning = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10070	A	Press the button 19S2 and hold		OK		Anthonia Mabowa - 494131	Train
10071	R	Read Defined Variable [TT] (MPU1)li_air_tc1remotecb = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10072	R	Read Defined Variable [TT] (MPU1)li_air_tc1mcbcompressor = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10073	R	Read Defined Variable [TT] (MPU1)air_bcu1airsupplyrunning = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10074	A	Release the button 19S2		OK		Anthonia Mabowa - 494131	Train
10075	R	Read Defined Variable [TT] (MPU1)li_air_tc1mcbcompressor = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10076	R	Read Defined Variable [TT] (MPU1)li_air_tc1remotecb = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10077	R	Read Defined Variable [TT] (MPU1)air_bcu1airsupplyrunning = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10078	A	Open circuit breaker 19Q2 in the LVB		OK		Anthonia Mabowa - 494131	Train
10079	R	Read Defined Variable [TT] (MPU1)li_air_tc1mcbcompressor = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10080	A	Press and hold the button 19S2		OK		Anthonia Mabowa - 494131	Train
10081	R	Read Defined Variable [TT] (MPU1)li_air_tc1remotecb = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10082	A	Release the button 19S2		OK		Anthonia Mabowa - 494131	Train
10083	R	Read Defined Variable [TT] (MPU1)lo_air_tc1remotecb = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10084	A	Close circuit breaker 19Q3		OK		Anthonia Mabowa - 494131	Train
10085	A	Press 19S2 and RELEASE in less than a second		OK		Anthonia Mabowa - 494131	Train
10086	R	Read Defined Variable [TT] (MPU1)li_air_tc1remotecb = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10087	R	Read Defined Variable [TT] (MPU1)li_air_tc1mcbcompressor = 1.0		OK	1	Anthonia Mabowa - 494131	Train

10088	R	Read Defined Variable [TT] (MPU1)air_bcu1airsupplyrunning = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10089	I	Compressor Manual Isolation TC2		OK		Anthonia Mabowa - 494131	Train
10090	A	Put the pneumatic switch 19S1 to ISOLATION position		OK		Anthonia Mabowa - 494131	Train
10091	R	Read Defined Variable [TT] (MPU1)li_air_tc2condemnedr1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10092	R	Read Defined Variable [TT] (MPU1)li_air_tc2condemnedr2 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10093	R	Read Defined Variable [TT] (MPU1)air_bcu1airsupplyrunning = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10094	A	Force [TT] (MPU1)lo_air_tc2compenabler2 = 1.0		OK		Tshembhani Khosa - 446920	Train
10095	R	Read Defined Variable [TT] (MPU1)air_bcu2airsupplyrunning = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10096	R	Read Defined Variable [TT] (MPU1)air_bcu2airsupplyok = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10097	R	Read Defined Variable [TT] (MPU1)air_bcu2airsupplydelay = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10098	A	Put the pneumatic switch 19S1 to NORMAL position		OK		Tshembhani Khosa - 446920	Train
10099	R	Read Defined Variable [TT] (MPU1)li_air_tc2condemnedr1 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10100	R	Read Defined Variable [TT] (MPU1)li_air_tc2condemnedr2 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10101	R	Read Defined Variable [TT] (MPU1)air_bcu2airsupplyrunning = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10102	R	Read Defined Variable [TT] (MPU1)air_bcu2airsupplydelay = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10103	R	Read Defined Variable [TT] (MPU1)air_bcu2airsupplyok = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10104	I	Compressor stops when it reaches 10 bar		OK		Tshembhani Khosa - 446920	Train
10105	R			OK	997	Tshembhani Khosa - 446920	Train

10106	R	Read Defined Variable [TT] (MPU1)air_bcu2airsupplyrunning = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10107	A	Remove active cab on TC1		OK		Anthonia Mabowa - 494131	Train
10108	R	Read Defined Variable [TT] (MPU1)air_bcu2airsupplyok = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10109	A	Active cab on TC2		OK		Anthonia Mabowa - 494131	Train
10110	R	Read Defined Variable [TT] (MPU1)air_bcu2airsupplydelay = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10111	I	Compressor Remote Isolation TC2		OK		Tshembhani Khosa - 446920	Train
10112	R	Read Defined Variable [TT] (MPU1)li_air_tc2mcbcompressor = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10113	R	Read Defined Variable [TT] (MPU1)li_air_tc2remotecb = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10114	I	It is important to make sure the main pipe pressure is always below 10 bar for the purpose of this test		OK		Tshembhani Khosa - 446920	Train
10115	A	Release the air in the main pipe until it reaches below 8.5 bar		OK		Tshembhani Khosa - 446920	Train
10116	R	Read Defined Variable [TT] (MPU1)air_bcu2airsupplyrunning = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10117	A	Open circuit breaker 19Q3		OK		Tshembhani Khosa - 446920	Train
10118	A	Press and hold the button 19S2		OK		Tshembhani Khosa - 446920	Train
10119	R	Read Defined Variable [TT] (MPU1)li_air_tc2remotecb = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10120	R	Read Defined Variable [TT] (MPU1)li_air_tc2mcbcompressor = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10121	A	Release the button 19S2		OK		Anthonia Mabowa - 494131	Train
10122	R	Read Defined Variable [TT] (MPU1)li_air_tc2mcbcompressor = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10123	R	Read Defined Variable [TT] (MPU1)li_air_tc2remotecb = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10124	A	Open circuit breaker 19Q2 in LVB		OK		Anthonia Mabowa - 494131	Train

10125	R	Read Defined Variable [TT] (MPU1)li_air_tc2mcbcompressor = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10126	A	Press and hold the button 19S2		OK		Anthonia Mabowa - 494131	Train
10127	R	Read Defined Variable [TT] (MPU1)li_air_tc2remotecb = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10128	A	Release the button 19S2		OK		Anthonia Mabowa - 494131	Train
10129	A	Close circuit breaker 19Q3		OK		Anthonia Mabowa - 494131	Train
10130	R	Read Defined Variable [TT] (MPU1)lo_air_tc2remotecb = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10131	A	Press 19S2 and RELEASE in less than a second		OK		Anthonia Mabowa - 494131	Train
10132	R	Read Defined Variable [TT] (MPU1)li_air_tc2mcbcompressor = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10133	R	Read Defined Variable [TT] (MPU1)air_bcu2airsupplyrunning = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10134	R	Read Defined Variable [TT] (MPU1)li_air_tc2remotecb = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10135	I	Air tightness of Main pipe and other pneumatic systems on train		OK		Anthonia Mabowa - 494131	Train
10136	A	Force [TT] (MPU1)lo_air_tc1compenabler1 = 0.0		OK		Tshembhani Khosa - 446920	Train
10137	A	Force [TT] (MPU1)lo_air_tc2compenabler1 = 0.0		OK		Tshembhani Khosa - 446920	Train
10138	A	Empty the main pipe pressure using draining cock A5/1 until it reaches below 7.5 bar		OK		Tshembhani Khosa - 446920	Train
10139	I	Put both compressors in service by closing circuit breaker 19Q2 and also ensure isolation switch 19S1 is in NORMAL position on both TC cars		OK		Tshembhani Khosa - 446920	Train
10140	A	Release [TT] (MPU1)lo_air_tc1compenabler1		OK		Tshembhani Khosa - 446920	Train
10141	A	Release [TT] (MPU1)lo_air_tc2compenabler1		OK		Tshembhani Khosa - 446920	Train

10142	I	Only one compressor starts when the pressure reaches below 8.5 bar. At 10bar +/- 0.2 bar the compressor stops.		OK		Tshembhani Khosa - 446920	Train
10143	I	After 10 minutes, the air in the main pipe should not be less than 9.3 bar		OK		Tshembhani Khosa - 446920	Train
10144	R	Read Undefined Variable [TT] (MPU1)air_bcu1mrpres		OK	793	Tshembhani Khosa - 446920	Train
10145	I	Air tightness of main reservoirs and associated devices combined with other pneumatic equipment's		OK		Tshembhani Khosa - 446920	Train
10146	A	Isolate the Service and Emergency Brake circuit of each car by turning the isolation cocks C1.3/1 and C.2.3/1 towards the isolation position		OK		Tshembhani Khosa - 446920	Train
10147	A	Reset the air in the main pipe to 10 bar+/- 0.2 bar		OK		Tshembhani Khosa - 446920	Train
10148	I	If necessary drain the air in the main pipe until at least one compressor starts to reset the pressure to 10 bar		OK		Tshembhani Khosa - 446920	Train
10149	R	Measure the pressure of the main pipe on A1.12 test point and verify that the pressure does not fall by more than 75 kPa (0.75 bar) after 10 minutes, from an initial pressure of 1000 kPa (10 bar).		OK		Tshembhani Khosa - 446920	Train
10150	R			OK	950	Tshembhani Khosa - 446920	Train
10151	A	NORMALISE the isolation cocks C1.3/1 and C2.3/1		OK		Tshembhani Khosa - 446920	Train
10152	I	Air tightness of brake cylinders and auxiliary reservoirs		OK		Tshembhani Khosa - 446920	Train
10153	R	The pressure on the pneumatic indicator is 10 bar +/-0.2 bar		OK		Tshembhani Khosa - 446920	Train
10154	A	Select driving direction to FORWARD position		OK		Tshembhani Khosa - 446920	Train
10155	A	Put Master Controller in 100% Service brake position		OK		Tshembhani Khosa - 446920	Train
10156	A	Using the manometer, check the SB values in each brake panel, in each car the pressure should not decrease more than		OK		Tshembhani Khosa - 446920	Train

		20kPa in over 12 minutes					
10157	R	SB TC1 Result Min/Max : 118<= x <= 158 (kPa)		OK	147	Tshembhani Khosa - 446920	Train
10158	R	SB M4 Result Min/Max : 133<= x <= 173 (kPa)		OK	140	Tshembhani Khosa - 446920	Train
10159	R	SB M1 Result Min/Max : 137<= x <= 177 (kPa)		OK	148	Tshembhani Khosa - 446920	Train
10160	R	SB M2 Result Min/Max : 137<= x <= 176 (kPa)		OK	142	Tshembhani Khosa - 446920	Train
10161	R	SB M3 Result Min/Max : 133<= x <= 173 (kPa)		OK	138	Tshembhani Khosa - 446920	Train
10162	R	SB TC2 Result Min/Max : 118<= x <= 158 (kPa)		OK	129	Tshembhani Khosa - 446920	Train
10163	R	Verify that the pressure gauge indicates the correct pressure values, according to the DDU BC: Brake cylinder(yellow indicator) MRP: Main Pipe(Red indicator)		OK		Anthonia Mabowa - 494131	Train
10164	I	Draining Cock for Intercar		OK		Tshembhani Khosa - 446920	Train
10165	I	Air in the main pipe should be 10 bar +/- 0.2 bar		OK		Tshembhani Khosa - 446920	Train
10166	A	This test is to ensure that the draining cocks are fully functional		OK		Tshembhani Khosa - 446920	Train
10167	A	Isolate all the cocks from M3 to M4		OK		Tshembhani Khosa - 446920	Train
10168	A	Drain the air on TC1 car using the cock F2.1/1		OK		Tshembhani Khosa - 446920	Train
10169	A	Drain the air on M4 car using the cock F2.1/1		OK		Tshembhani Khosa - 446920	Train
10170	A	Drain the air on M1 car using the cock F2.1/1		OK		Tshembhani Khosa - 446920	Train
10171	A	Drain the air on M2 car using the cock F2.1/1		OK		Tshembhani Khosa - 446920	Train
10172	A	Drain the air on M3 car using the cock F2.1/1		OK		Tshembhani Khosa - 446920	Train
10173	A	Drain the air on TC2 car using the cock F2.1/1		OK		Tshembhani Khosa - 446920	Train
10174	A	Normalise all the cocks		OK		Tshembhani Khosa - 446920	Train

10175	A	Use the tool on the top right corner to add the manometer used for this test (serial number)		OK		Tshembhani Khosa - 446920	Train
10176	I	End of Test		OK		Tshembhani Khosa - 446920	Train

Section 11 – Monitoring Circuit Breakers

11.3 Instructions list

11.3.1 080_MCB-Monitoring Circuit Breakers

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	Monitoring Circuit Breakers SPP=080		OK		Tshembhani Khosa - 446920	Train
10002	I	TC1		OK		Tshembhani Khosa - 446920	Train
10003	A	Open the circuit breaker 15Q4		OK		Tshembhani Khosa - 446920	Train
10004	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cb110distrib = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10005	A	Close the circuit breaker 15Q4		OK		Tshembhani Khosa - 446920	Train
10006	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cb110distrib = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10007	A	Open the circuit breaker 13Q1		OK		Tshembhani Khosa - 446920	Train
10008	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cb230distrib = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10009	A	Close the circuit breaker 13Q1		OK		Tshembhani Khosa - 446920	Train
10010	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cb230distrib = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10011	A	Open the circuit breaker 57Q1		OK		Tshembhani Khosa - 446920	Train
10012	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cb400distrib = 0.0		OK	0	Walter Sigudla - 486333	Train
10013	A	Close the circuit breaker 57Q1		OK		Walter Sigudla - 486333	Train
10014	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cb400distrib = 1.0		OK	1	Walter Sigudla - 486333	Train
10015	A	Open the circuit breaker 72Q1		OK		Tshembhani Khosa - 446920	Train
10016	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cbauxfct = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10017	A	Close the circuit breaker 72Q1		OK		Tshembhani Khosa - 446920	Train

10018	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cbauxfct = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10019	A	Open the circuit breaker 40Q4		OK		Tshembhani Khosa - 446920	Train
10020	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cbbrake = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10021	A	Close the circuit breaker 40Q4		OK		Tshembhani Khosa - 446920	Train
10022	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cbbrake = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10023	A	Open the circuit breaker 50Q7		OK		Tshembhani Khosa - 446920	Train
10024	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cbdoors = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10025	A	Close the circuit breaker 50Q7		OK		Tshembhani Khosa - 446920	Train
10026	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cbdoors = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10027	A	Open the circuit breaker 22Q1		OK		Tshembhani Khosa - 446920	Train
10028	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cbenergy = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10029	A	Close the circuit breaker 22Q1		OK		Tshembhani Khosa - 446920	Train
10030	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cbenergy = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10031	A	Open the circuit breaker 44Q1		OK		Tshembhani Khosa - 446920	Train
10032	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cbsafetyfctr1 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10033	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cbsafetyfctr2 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10034	A	Close the circuit breaker 44Q1		OK		Tshembhani Khosa - 446920	Train
10035	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cbsafetyfctr1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10036	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cbsafetyfctr2 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10037	A	Open the circuit breaker 72Q2		OK		Tshembhani Khosa - 446920	Train

10038	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cbsockets = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10039	A	Close the circuit breaker 72Q2		OK		Tshembhani Khosa - 446920	Train
10040	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cbsockets = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10041	A	Open the circuit breaker 25Q11		OK		Tshembhani Khosa - 446920	Train
10042	R	Read Defined Variable [TT] (MPU2)Li_DDK_Tc1CbTcms1R2 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10043	A	Close the circuit breaker 25Q11		OK		Tshembhani Khosa - 446920	Train
10044	A	Open the circuit breaker 25Q13		OK		Tshembhani Khosa - 446920	Train
10045	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cbtcms1r1 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10046	A	Close the circuit breaker 25Q13		OK		Tshembhani Khosa - 446920	Train
10047	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cbtcms1r1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10048	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cbtcms1r2 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10049	A	Open the circuit breaker 25Q10		OK		Tshembhani Khosa - 446920	Train
10050	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cbtcms2r1 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10051	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cbtcms2r2 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10052	A	Close the circuit breaker 25Q10		OK		Tshembhani Khosa - 446920	Train
10053	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cbtcms2r1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10054	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cbtcms2r2 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10055	A	Open the circuit breaker 75Q1		OK		Tshembhani Khosa - 446920	Train
10056	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cbdrivingfctr1 = 0.0		OK	0	Tshembhani Khosa - 446920	Train

10057	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cbdrivingfctr2 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10058	A	Close the circuit breaker 75Q1		OK		Tshembhani Khosa - 446920	Train
10059	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cbdrivingfctr1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10060	R	Read Defined Variable [TT] (MPU1)li_ddk_tc1cbdrivingfctr2 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10061	I	M4		OK		Tshembhani Khosa - 446920	Train
10062	A	Open the circuit breaker 15Q4		OK		Tshembhani Khosa - 446920	Train
10063	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cb110distrib = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10064	A	Close the circuit breaker 15Q4		OK		Tshembhani Khosa - 446920	Train
10065	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cb110distrib = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10066	A	Open the circuit breaker 13Q1		OK		Tshembhani Khosa - 446920	Train
10067	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cb230distrib = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10068	A	Close the circuit breaker 13Q1		OK		Tshembhani Khosa - 446920	Train
10069	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cb230distrib = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10070	A	Open the circuit breaker 57Q1		OK		Tshembhani Khosa - 446920	Train
10071	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cb400distrib = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10072	A	Close the circuit breaker 57Q1		OK		Tshembhani Khosa - 446920	Train
10073	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cb400distrib = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10074	A	Open the circuit breaker 40Q1		OK		Tshembhani Khosa - 446920	Train
10075	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cbbrake = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10076	A	Close the circuit breaker 40Q1		OK		Tshembhani Khosa - 446920	Train

10077	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cbbrake = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10078	A	Open the circuit breaker 50Q4		OK		Tshembhani Khosa - 446920	Train
10079	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cbdoors = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10080	A	Close the circuit breaker 50Q4		OK		Tshembhani Khosa - 446920	Train
10081	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cbdoors = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10082	A	Open the circuit breaker 57Q2		OK		Tshembhani Khosa - 446920	Train
10083	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cbhvac = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10084	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cbhvac = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10085	A	Close the circuit breaker 57Q2		OK		Tshembhani Khosa - 446920	Train
10086	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cbhvac = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10087	A	Open the circuit breaker 52Q4		OK		Tshembhani Khosa - 446920	Train
10088	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cblighting = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10089	A	Close the circuit breaker 52Q4		OK		Tshembhani Khosa - 446920	Train
10090	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cblighting = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10091	A	Open the circuit breaker 54Q10		OK		Tshembhani Khosa - 446920	Train
10092	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cbpacis = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10093	A	Close the circuit breaker 54Q10		OK		Tshembhani Khosa - 446920	Train
10094	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cbpacis = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10095	A	Open the circuit breaker 44Q1		OK		Tshembhani Khosa - 446920	Train
10096	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cbsafetyfctr1 = 0.0		OK	0	Tshembhani Khosa - 446920	Train

10097	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cbsafetyfctr2 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10098	A	Close the circuit breaker 44Q1		OK		Tshembhani Khosa - 446920	Train
10099	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cbsafetyfctr1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10100	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cbsafetyfctr2 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10101	A	Open the circuit breaker 13Q2		OK		Tshembhani Khosa - 446920	Train
10102	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cbsockets = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10103	A	Close the circuit breaker 13Q2		OK		Tshembhani Khosa - 446920	Train
10104	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cbsockets = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10105	A	Open the circuit breaker 25Q6		OK		Tshembhani Khosa - 446920	Train
10106	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cbtcms1r1 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10107	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cbtcms1r2 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10108	A	Close the circuit breaker 25Q6		OK		Tshembhani Khosa - 446920	Train
10109	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cbtcms1r1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10110	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cbtcms1r2 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10111	A	Open the circuit breaker 25Q10		OK		Tshembhani Khosa - 446920	Train
10112	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cbtcms2r1 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10113	A	Close the circuit breaker 25Q10		OK		Tshembhani Khosa - 446920	Train
10114	A	Open the circuit breaker 25Q14		OK		Tshembhani Khosa - 446920	Train
10115	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cbtcms2r2 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10116	A	Close the circuit breaker 25Q14		OK		Tshembhani Khosa - 446920	Train

10117	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cbtcms2r1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10118	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cbtcms2r2 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10119	A	Open the circuit breaker 33Q1		OK		Tshembhani Khosa - 446920	Train
10120	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cbtraction = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10121	A	Close the circuit breaker 33Q1		OK		Tshembhani Khosa - 446920	Train
10122	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cbtraction = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10123	A	Open the circuit breaker 55Q2		OK		Tshembhani Khosa - 446920	Train
10124	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cbvideoinfo = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10125	A	Close the circuit breaker 55Q2		OK		Tshembhani Khosa - 446920	Train
10126	R	Read Defined Variable [TT] (MPU1)li_ddk_m4cbvideoinfo = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10127	I	M1		OK		Tshembhani Khosa - 446920	Train
10128	A	Open the circuit breaker 15Q4		OK		Tshembhani Khosa - 446920	Train
10129	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cb110distrib = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10130	A	Close the circuit breaker 15Q4		OK		Tshembhani Khosa - 446920	Train
10131	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cb110distrib = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10132	A	Open the circuit breaker 13Q1		OK		Tshembhani Khosa - 446920	Train
10133	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cb230distrib = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10134	A	Close the circuit breaker 13Q1		OK		Tshembhani Khosa - 446920	Train
10135	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cb230distrib = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10136	A	Open the circuit breaker 57Q1		OK		Tshembhani Khosa - 446920	Train

10137	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cb400distrib = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10138	A	Close the circuit breaker 57Q1		OK		Tshembhani Khosa - 446920	Train
10139	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cb400distrib = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10140	A	Open the circuit breaker 40Q1		OK		Tshembhani Khosa - 446920	Train
10141	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cbbrake = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10142	A	Close the circuit breaker 40Q1		OK		Tshembhani Khosa - 446920	Train
10143	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cbbrake = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10144	A	Open the circuit breaker 50Q4		OK		Tshembhani Khosa - 446920	Train
10145	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cbdoors = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10146	A	Close the circuit breaker 50Q4		OK		Tshembhani Khosa - 446920	Train
10147	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cbdoors = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10148	A	Open the circuit breaker 21Q2		OK		Tshembhani Khosa - 446920	Train
10149	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cbenergy = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10150	A	Close the circuit breaker 21Q2		OK		Tshembhani Khosa - 446920	Train
10151	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cbenergy = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10152	A	Open the circuit breaker 57Q2		OK		Tshembhani Khosa - 446920	Train
10153	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cbhvac = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10154	A	Close the circuit breaker 57Q2		OK		Tshembhani Khosa - 446920	Train
10155	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cbhvac = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10156	A	Open the circuit breaker 52Q4		OK		Tshembhani Khosa - 446920	Train

10157	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cblighting = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10158	A	Close the circuit breaker 52Q4		OK		Tshembhani Khosa - 446920	Train
10159	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cblighting = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10160	A	Open the circuit breaker 54Q10		OK		Tshembhani Khosa - 446920	Train
10161	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cbpacis = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10162	A	Close the circuit breaker 54Q10		OK		Tshembhani Khosa - 446920	Train
10163	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cbpacis = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10164	A	Open the circuit breaker 44Q1		OK		Tshembhani Khosa - 446920	Train
10165	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cbsafetyfctr1 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10166	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cbsafetyfctr2 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10167	A	Close the circuit breaker 44Q1		OK		Tshembhani Khosa - 446920	Train
10168	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cbsafetyfctr1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10169	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cbsafetyfctr2 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10170	A	Open the circuit breaker 13Q2		OK		Tshembhani Khosa - 446920	Train
10171	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cbsockets = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10172	A	Close the circuit breaker 13Q2		OK		Tshembhani Khosa - 446920	Train
10173	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cbsockets = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10174	A	Open the circuit breaker 25Q6		OK		Tshembhani Khosa - 446920	Train
10175	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cbtcms1r1 = 0.0		OK	0	Tshembhani Khosa - 446920	Train

10176	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cbtcms1r2 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10177	A	Close the circuit breaker 25Q6		OK		Tshembhani Khosa - 446920	Train
10178	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cbtcms1r1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10179	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cbtcms1r2 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10180	A	Open the circuit breaker 25Q10		OK		Tshembhani Khosa - 446920	Train
10181	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cbtcms2r1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10182	A	Close the circuit breaker 25Q10		OK		Tshembhani Khosa - 446920	Train
10183	A	Open the circuit breaker 25Q14		OK		Tshembhani Khosa - 446920	Train
10184	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cbtcms2r2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10185	A	Close the circuit breaker 25Q14		OK		Tshembhani Khosa - 446920	Train
10186	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cbtcms2r1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10187	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cbtcms2r2 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10188	A	Open the circuit breaker 33Q1		OK		Tshembhani Khosa - 446920	Train
10189	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cbtraction = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10190	A	Close the circuit breaker 33Q1		OK		Tshembhani Khosa - 446920	Train
10191	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cbtraction = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10192	A	Open the circuit breaker 55Q2		OK		Tshembhani Khosa - 446920	Train
10193	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cbvideoinfo = 0.0		OK	0	Walter Sigudla - 486333	Train
10194	A	Close the circuit breaker 55Q2		OK		Tshembhani Khosa - 446920	Train
10195	R	Read Defined Variable [TT] (MPU1)li_ddk_m1cbvideoinfo = 1.0		OK	1	Tshembhani Khosa - 446920	Train

10196	I	M2		OK		Tshembhani Khosa - 446920	Train
10197	A	Open the circuit breaker 15Q4		OK		Tshembhani Khosa - 446920	Train
10198	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cb110distrib = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10199	A	Close the circuit breaker 15Q4		OK		Tshembhani Khosa - 446920	Train
10200	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cb110distrib = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10201	A	Open the circuit breaker 13Q1		OK		Tshembhani Khosa - 446920	Train
10202	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cb230distrib = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10203	A	Close the circuit breaker 13Q1		OK		Tshembhani Khosa - 446920	Train
10204	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cb230distrib = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10205	A	Open the circuit breaker 57Q1		OK		Tshembhani Khosa - 446920	Train
10206	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cb400distrib = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10207	A	Close the circuit breaker 57Q1		OK		Tshembhani Khosa - 446920	Train
10208	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cb400distrib = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10209	A	Open the circuit breaker 40Q1		OK		Tshembhani Khosa - 446920	Train
10210	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbbrake = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10211	A	Close the circuit breaker 40Q1		OK		Tshembhani Khosa - 446920	Train
10212	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbbrake = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10213	A	Open the circuit breaker 50Q4		OK		Tshembhani Khosa - 446920	Train
10214	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbdoors = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10215	A	Close the circuit breaker 50Q4		OK		Tshembhani Khosa - 446920	Train

10216	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbdoors = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10217	A	Open the circuit breaker 21Q2		OK		Tshembhani Khosa - 446920	Train
10218	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbenergy = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10219	A	Close the circuit breaker 21Q2		OK		Tshembhani Khosa - 446920	Train
10220	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbenergy = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10221	A	Open the circuit breaker 62Q2		OK		Tshembhani Khosa - 446920	Train
10222	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbertmsr1 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10223	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbertmsr2 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10224	A	Close the circuit breaker 62Q2		OK		Tshembhani Khosa - 446920	Train
10225	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbertmsr1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10226	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbertmsr2 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10227	A	Open the circuit breaker 57Q2		OK		Tshembhani Khosa - 446920	Train
10228	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbhvac = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10229	A	Close the circuit breaker 57Q2		OK		Tshembhani Khosa - 446920	Train
10230	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbhvac = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10231	A	Open the circuit breaker 52Q4		OK		Tshembhani Khosa - 446920	Train
10232	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cblighting = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10233	A	Close the circuit breaker 52Q4		OK		Tshembhani Khosa - 446920	Train
10234	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cblighting = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10235	A	Open the circuit breaker 54Q10		OK		Tshembhani Khosa - 446920	Train

10236	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbpacis = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10237	A	Close the circuit breaker 54Q10		OK		Tshembhani Khosa - 446920	Train
10238	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbpacis = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10239	A	Open the circuit breaker 44Q1		OK		Tshembhani Khosa - 446920	Train
10240	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbsafetyfctr1 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10241	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbsafetyfctr2 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10242	A	Close the circuit breaker 44Q1		OK		Tshembhani Khosa - 446920	Train
10243	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbsafetyfctr1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10244	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbsafetyfctr2 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10245	A	Open the circuit breaker 13Q2		OK		Tshembhani Khosa - 446920	Train
10246	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbsockets = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10247	A	Close the circuit breaker 13Q2		OK		Tshembhani Khosa - 446920	Train
10248	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbsockets = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10249	A	Open the circuit breaker 25Q6		OK		Tshembhani Khosa - 446920	Train
10250	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbtcms1r1 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10251	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbtcms1r2 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10252	A	Close the circuit breaker 25Q6		OK		Tshembhani Khosa - 446920	Train
10253	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbtcms1r1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10254	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbtcms1r2 = 1.0		OK	1	Tshembhani Khosa - 446920	Train

10255	A	Open the circuit breaker 25Q10		OK		Tshembhani Khosa - 446920	Train
10256	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbtcms2r1 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10257	A	Close the circuit breaker 25Q10		OK		Tshembhani Khosa - 446920	Train
10258	A	Open the circuit breaker 25Q14		OK		Tshembhani Khosa - 446920	Train
10259	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbtcms2r2 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10260	A	Close the circuit breaker 25Q14		OK		Tshembhani Khosa - 446920	Train
10261	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbtcms2r1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10262	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbtcms2r2 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10263	A	Open the circuit breaker 33Q1		OK		Tshembhani Khosa - 446920	Train
10264	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbtraction = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10265	A	Close the circuit breaker 33Q1		OK		Tshembhani Khosa - 446920	Train
10266	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbtraction = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10267	A	Open the circuit breaker 55Q2		OK		Tshembhani Khosa - 446920	Train
10268	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbvideoinfo = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10269	A	Close the circuit breaker 55Q2		OK		Tshembhani Khosa - 446920	Train
10270	R	Read Defined Variable [TT] (MPU1)li_ddk_m2cbvideoinfo = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10271	I	M3		OK		Tshembhani Khosa - 446920	Train
10272	A	Open the circuit breaker 15Q4		OK		Tshembhani Khosa - 446920	Train
10273	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cb110distrib = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10274	A	Close the circuit breaker 15Q4		OK		Tshembhani Khosa - 446920	Train

10275	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cb110distrib = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10276	A	Open the circuit breaker 13Q1		OK		Tshembhani Khosa - 446920	Train
10277	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cb230distrib = 0.0		OK	0	Walter Sigudla - 486333	Train
10278	A	Close the circuit breaker 13Q1		OK		Tshembhani Khosa - 446920	Train
10279	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cb230distrib = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10280	A	Open the circuit breaker 57Q1		OK		Tshembhani Khosa - 446920	Train
10281	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cb400distrib = 0.0		OK	0	Walter Sigudla - 486333	Train
10282	A	Close the circuit breaker 57Q1		OK		Tshembhani Khosa - 446920	Train
10283	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cb400distrib = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10284	A	Open the circuit breaker 40Q1		OK		Tshembhani Khosa - 446920	Train
10285	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cbbrake = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10286	A	Close the circuit breaker 40Q1		OK		Tshembhani Khosa - 446920	Train
10287	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cbbrake = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10288	A	Open the circuit breaker 50Q4		OK		Tshembhani Khosa - 446920	Train
10289	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cbdoors = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10290	A	Close the circuit breaker 50Q4		OK		Tshembhani Khosa - 446920	Train
10291	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cbdoors = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10292	A	Open the circuit breaker 57Q2		OK		Tshembhani Khosa - 446920	Train
10293	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cbhvac = 0.0		OK	0	Walter Sigudla - 486333	Train
10294	A	Close the circuit breaker 57Q2		OK		Tshembhani Khosa - 446920	Train

10295	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cbhvac = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10296	A	Open the circuit breaker 52Q4		OK		Tshembhani Khosa - 446920	Train
10297	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cblighting = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10298	A	Close the circuit breaker 52Q4		OK		Tshembhani Khosa - 446920	Train
10299	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cblighting = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10300	A	Open the circuit breaker 54Q10		OK		Tshembhani Khosa - 446920	Train
10301	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cbpacis = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10302	A	Close the circuit breaker 54Q10		OK		Tshembhani Khosa - 446920	Train
10303	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cbpacis = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10304	A	Open the circuit breaker 44Q1		OK		Tshembhani Khosa - 446920	Train
10305	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cbsafetyfctr1 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10306	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cbsafetyfctr2 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10307	A	Close the circuit breaker 44Q1		OK		Tshembhani Khosa - 446920	Train
10308	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cbsafetyfctr1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10309	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cbsafetyfctr2 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10310	A	Open the circuit breaker 13Q2		OK		Tshembhani Khosa - 446920	Train
10311	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cbsockets = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10312	A	Close the circuit breaker 13Q2		OK		Tshembhani Khosa - 446920	Train
10313	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cbsockets = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10314	A	Open the circuit breaker 25Q6		OK		Tshembhani Khosa - 446920	Train

10315	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cbtcms1r1 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10316	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cbtcms1r2 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10317	A	Close the circuit breaker 25Q6		OK		Tshembhani Khosa - 446920	Train
10318	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cbtcms1r1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10319	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cbtcms1r2 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10320	A	Open the circuit breaker 25Q10		OK		Tshembhani Khosa - 446920	Train
10321	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cbtcms2r1 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10322	A	Close the circuit breaker 25Q10		OK		Tshembhani Khosa - 446920	Train
10323	A	Open the circuit breaker 25Q14		OK		Tshembhani Khosa - 446920	Train
10324	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cbtcms2r2 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10325	A	Close the circuit breaker 25Q14		OK		Tshembhani Khosa - 446920	Train
10326	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cbtcms2r1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10327	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cbtcms2r2 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10328	A	Open the circuit breaker 33Q1		OK		Tshembhani Khosa - 446920	Train
10329	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cbtraction = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10330	A	Close the circuit breaker 33Q1		OK		Tshembhani Khosa - 446920	Train
10331	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cbtraction = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10332	A	Open the circuit breaker 55Q2		OK		Tshembhani Khosa - 446920	Train
10333	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cbvideoinfo = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10334	A	Close the circuit breaker 55Q2		OK		Tshembhani Khosa - 446920	Train

10335	R	Read Defined Variable [TT] (MPU1)li_ddk_m3cbvideoinfo = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10336	I	TC2		OK		Tshembhani Khosa - 446920	Train
10337	A	Open the circuit breaker 15Q4		OK		Tshembhani Khosa - 446920	Train
10338	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cb110distrib = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10339	A	Close the circuit breaker 15Q4		OK		Tshembhani Khosa - 446920	Train
10340	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cb110distrib = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10341	A	Open the circuit breaker 13Q1		OK		Tshembhani Khosa - 446920	Train
10342	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cb230distrib = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10343	A	Close the circuit breaker 13Q1		OK		Tshembhani Khosa - 446920	Train
10344	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cb230distrib = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10345	A	Open the circuit breaker 57Q1		OK		Tshembhani Khosa - 446920	Train
10346	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cb400distrib = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10347	A	Close the circuit breaker 57Q1		OK		Tshembhani Khosa - 446920	Train
10348	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cb400distrib = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10349	A	Open the circuit breaker 72Q1		OK		Tshembhani Khosa - 446920	Train
10350	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cbauxfct = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10351	A	Close the circuit breaker 72Q1		OK		Tshembhani Khosa - 446920	Train
10352	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cbauxfct = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10353	A	Open the circuit breaker 40Q4		OK		Tshembhani Khosa - 446920	Train
10354	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cbbrake = 0.0		OK	0	Tshembhani Khosa - 446920	Train

10355	A	Close the circuit breaker 40Q4		OK		Tshembhani Khosa - 446920	Train
10356	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cbbrake = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10357	A	Open the circuit breaker 50Q7		OK		Tshembhani Khosa - 446920	Train
10358	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cbdoors = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10359	A	Close the circuit breaker 50Q7		OK		Tshembhani Khosa - 446920	Train
10360	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cbdoors = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10361	A	Open the circuit breaker 22Q1		OK		Tshembhani Khosa - 446920	Train
10362	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cbenergy = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10363	A	Close the circuit breaker 22Q1		OK		Tshembhani Khosa - 446920	Train
10364	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cbenergy = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10365	A	Open the circuit breaker 44Q1.		OK		Tshembhani Khosa - 446920	Train
10366	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cbsafetyfctr1 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10367	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cbsafetyfctr2 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10368	A	Close the circuit breaker 44Q1		OK		Tshembhani Khosa - 446920	Train
10369	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cbsafetyfctr1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10370	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cbsafetyfctr2 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10371	A	Open the circuit breaker 72Q2		OK		Tshembhani Khosa - 446920	Train
10372	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cbsockets = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10373	A	Close the circuit breaker 72Q2		OK		Tshembhani Khosa - 446920	Train
10374	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cbsockets = 1.0		OK	1	Tshembhani Khosa - 446920	Train

10375	A	Open the circuit breaker 25Q11		OK		Tshembhani Khosa - 446920	Train
10376	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cbtcms1r1 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10377	A	Close the circuit breaker 25Q11		OK		Tshembhani Khosa - 446920	Train
10378	A	Open the circuit breaker 25Q15		OK		Tshembhani Khosa - 446920	Train
10379	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cbtcms1r2 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10380	A	Close the circuit breaker 25Q15		OK		Tshembhani Khosa - 446920	Train
10381	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cbtcms1r1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10382	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cbtcms1r2 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10383	A	Open the circuit breaker 25Q10		OK		Tshembhani Khosa - 446920	Train
10384	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cbtcms2r1 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10385	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cbtcms2r2 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10386	A	Close the circuit breaker 25Q10		OK		Tshembhani Khosa - 446920	Train
10387	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cbtcms2r1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10388	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cbtcms2r2 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10389	A	Open the circuit breaker 75Q1		OK		Tshembhani Khosa - 446920	Train
10390	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cbdrivingfctr1 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10391	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cbdrivingfctr2 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10392	A	Close the circuit breaker 75Q1		OK		Tshembhani Khosa - 446920	Train
10393	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cbdrivingfctr1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train

10394	R	Read Defined Variable [TT] (MPU1)li_ddk_tc2cbdrivingfctr2 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10395	R	On the Driver's event list, check there are no IOS recorded about circuit breakers		OK		Tshembhani Khosa - 446920	Train
10396	I	End of Test		OK		Tshembhani Khosa - 446920	Train

Section 12 – HVAC Air Conditioning

12.3 Instructions list

12.3.1 057_HVAC-HVAC Air Conditioning

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	Air Conditioning SPP=057		OK		Walter Sigudla - 486333	Train
10002	I	HVAC panel key switch should be in AUTO position for all cars		OK		Walter Sigudla - 486333	Train
10003	I	Train Prepared in High voltage with active cab on TC1		OK		Walter Sigudla - 486333	Train
10004	I	Please note that HVAC has protection against too low and too high temperatures. Normally the event that HVAC will be report is BLP when the temperature is too cold, or it will report high duct temperature if the temperature is too hot. It is important to note that this is not a fault.		OK		Walter Sigudla - 486333	Train
10005	I	The HVAC parameters are set on the DDU maintenance screen		OK		Walter Sigudla - 486333	Train
10006	I	Cabin TC1		OK		Walter Sigudla - 486333	Train
10007	I	Use the temperature sensor to verify the temperature of the cabin		OK		Walter Sigudla - 486333	Train
10008	I	Open the Program HCU_finder.exe click on the IP address of a specific car, check the picture attached		OK		Walter Sigudla - 486333	Train
10009	I	Check the Steps below and compare with Maintenance software		OK		Walter Sigudla - 486333	Train
10010	A	Turn Key 30A1.S1 to Active Cabin Position on TC1		OK		Walter Sigudla - 486333	Train
10011	A	Select the switch 57S1 to Low-Speed Ventilation		OK		Walter Sigudla - 486333	Train
10012	A	Select the switch '57S2' to position 1		OK		Walter Sigudla - 486333	Train
10013	R	Temperature is set to 20°C		OK		Walter Sigudla - 486333	Train
10014	A	Select the switch '57S2' to position 2		OK		Walter Sigudla - 486333	Train

10015	R	Temperature is set to 22°C		OK		Walter Sigudla - 486333	Train
10016	A	Select the switch '57S2' to position 3		OK		Walter Sigudla - 486333	Train
10017	R	Temperature is set to 24°C		OK		Walter Sigudla - 486333	Train
10018	A	Select the switch '57S2' to position 4		OK		Walter Sigudla - 486333	Train
10019	R	Temperature is set to 26°C		OK		Walter Sigudla - 486333	Train
10020	A	Now select the switch '57S1' to High Ventilation		OK		Walter Sigudla - 486333	Train
10021	A	Select the switch '57S2' to position 1		OK		Walter Sigudla - 486333	Train
10022	R	Temperature is set to 20°C		OK		Walter Sigudla - 486333	Train
10023	A	Select the switch '57S2' to position 2		OK		Walter Sigudla - 486333	Train
10024	R	Temperature is set to 22°C		OK		Walter Sigudla - 486333	Train
10025	A	Select the switch '57S2' to position 3		OK		Walter Sigudla - 486333	Train
10026	R	Temperature is set to 24°C		OK		Walter Sigudla - 486333	Train
10027	A	Select the switch '57S2' to position 4		OK		Walter Sigudla - 486333	Train
10028	R	Temperature is set to 26°C		OK		Walter Sigudla - 486333	Train
10029	I	Cabin HVAC Fault on TC1		OK		Walter Sigudla - 486333	Train
10030	A	Select the switch '57S1' to OFF position		OK		Walter Sigudla - 486333	Train
10031	A	Trip the Circuit-Breaker F120 to simulate the fault. Located in HVAC Control Panel		OK		Walter Sigudla - 486333	Train
10032	A	Turn on the cabin HVAC by switch '57S1' and verify on HCU Finder if the operation is according to the selected position		OK		Walter Sigudla - 486333	Train
10033	R	Operation speed selection is working properly		OK		Walter Sigudla - 486333	Train
10034	A	Select the switch '57S1' to OFF position		OK		Walter Sigudla - 486333	Train
10035	A	Normalize the Circuit Breaker F120		OK		Walter Sigudla - 486333	Train

10036	A	Turn on the cabin HVAC by switch '57S1' and check its behaviour.		OK		Walter Sigudla - 486333	Train
10037	I	Cabin Footrest Heater Test on TC1		OK		Walter Sigudla - 486333	Train
10038	R	Read Defined Variable [TT] (MPU1)li_hva_tc1footheaterfault___1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10039	R	Foot Heater is Off		OK		Walter Sigudla - 486333	Train
10040	A	Simulate a failure of the heater by opening circuit breaker 57Q2		OK		Walter Sigudla - 486333	Train
10041	A	Press the button 57S3		OK		Walter Sigudla - 486333	Train
10042	R	Foot Heater is Off		OK		Walter Sigudla - 486333	Train
10043	R	Read Defined Variable [TT] (MPU1)li_hva_tc1footheaterfault___1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10044	A	Release '57S3' pushbutton		OK		Walter Sigudla - 486333	Train
10045	A	Close circuit breaker 57Q2		OK		Walter Sigudla - 486333	Train
10046	A	Press the button 57S3 to activate the foot heater		OK		Walter Sigudla - 486333	Train
10047	R	Read Defined Variable [TT] (MPU1)li_hva_tc1footheaterfault___1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10048	R	Foot Heater is ON		OK		Walter Sigudla - 486333	Train
10049	I	HVAC Saloon TC1		OK		Walter Sigudla - 486333	Train
10050	A	Open the Program HCU_finder.exe click on the line where it shows the IP Address for TC1		OK		Walter Sigudla - 486333	Train
10051	A	On the maintenance software web-browser, clear all the alarms and events for TC1 car		OK		Walter Sigudla - 486333	Train
10052	A	Launch the HVAC test for TC1 car on the DDU maintenance screen		OK		Walter Sigudla - 486333	Train
10053	A	On the maintenance software, check that the HVAC mode for TC1 corresponds to the status on the DDU Screen. For every 3		OK		Walter Sigudla - 486333	Train

		minutes the HVAC mode should change between Ventilation, Heating and Cooling					
10054	R	After 9 to 12 minutes, the TC1 saloon HVAC test has passed.		OK		Walter Sigudla - 486333	Train
10055	I	If the test has not passed, use the maintenance software to check the alarms recorded during testing to help with fault finding.		OK		Walter Sigudla - 486333	Train
10056	A	Launch the HVAC test for the TC1 Cab		OK		Walter Sigudla - 486333	Train
10057	A	On the maintenance software, check that the HVAC mode for TC1 Cab corresponds to the status on the DDU Screen. For every 3 minutes the HVAC mode should change between Ventilation, Heating and Cooling		OK		Walter Sigudla - 486333	Train
10058	R	After 9 to 12 minutes, the TC1 cab HVAC test has passed.		OK		Walter Sigudla - 486333	Train
10059	I	If the test has not passed, use the maintenance software to check the alarms recorded during testing to help with fault finding.		OK		Walter Sigudla - 486333	Train
10060	I	HVAC Saloon M4		OK		Walter Sigudla - 486333	Train
10061	A	Open the Program HCU_finder.exe click on the line where it shows the IP Address for M4		OK		Walter Sigudla - 486333	Train
10062	A	On the maintenance software web-browser, clear all the alarms and events for M4 car		OK		Walter Sigudla - 486333	Train
10063	A	Launch the HVAC test for M4 car on the DDU maintenance screen		OK		Walter Sigudla - 486333	Train
10064	A	On the maintenance software, check that the HVAC mode for M4 corresponds to the status on the DDU Screen. For every 3 minutes the HVAC mode should change between Ventilation, Heating and Cooling		OK		Walter Sigudla - 486333	Train
10065	R	After 9 to 12 minutes, the M4 saloon HVAC test has passed.		OK		Walter Sigudla - 486333	Train
10066	I	If the test has not passed, use the maintenance software to check the alarms recorded during testing to help with fault		OK		Walter Sigudla - 486333	Train

		finding.					
10067	I	HVAC Saloon M1		OK		Walter Sigudla - 486333	Train
10068	A	Open the Program HCU_finder.exe click on the line where it shows the IP Address for M1		OK		Walter Sigudla - 486333	Train
10069	A	On the maintenance software web-browser, clear all the alarms and events for M1 car		OK		Walter Sigudla - 486333	Train
10070	A	Launch the HVAC test for M1 car on the DDU maintenance screen		OK		Walter Sigudla - 486333	Train
10071	A	On the maintenance software, check that the HVAC mode for M1 corresponds to the status on the DDU Screen. For every 3 minutes the HVAC mode should change between Ventilation, Heating and Cooling		OK		Walter Sigudla - 486333	Train
10072	R	After 9 to 12 minutes, the M1 saloon HVAC test has passed.		OK		Walter Sigudla - 486333	Train
10073	I	If the test has not passed, use the maintenance software to check the alarms recorded during testing to help with fault finding.		OK		Walter Sigudla - 486333	Train
10074	I	HVAC Saloon M2		OK		Walter Sigudla - 486333	Train
10075	A	Open the Program HCU_finder.exe click on the line where it shows the IP Address for M2		OK		Walter Sigudla - 486333	Train
10076	A	On the maintenance software web-browser, clear all the alarms and events for M2 car		OK		Walter Sigudla - 486333	Train
10077	A	Launch the HVAC test for M2 car on the DDU maintenance screen		OK		Walter Sigudla - 486333	Train
10078	A	On the maintenance software, check that the HVAC mode for M2 corresponds to the status on the DDU Screen. For every 3 minutes the HVAC mode should change between Ventilation, Heating and Cooling		OK		Walter Sigudla - 486333	Train
10079	R	After 9 to 12 minutes, the M2 saloon HVAC test has passed.		OK		Walter Sigudla - 486333	Train
10080	I	If the test has not passed, use the maintenance software to check the alarms		OK		Walter Sigudla - 486333	Train

		recorded during testing to help with fault finding.					
10081	I	HVAC Saloon M3		OK		Walter Sigudla - 486333	Train
10082	A	Open the Program HCU_finder.exe click on the line where it shows the IP Address for M3		OK		Walter Sigudla - 486333	Train
10083	A	On the maintenance software web-browser, clear all the alarms and events for M3 car		OK		Walter Sigudla - 486333	Train
10084	A	Launch the HVAC test for M3 car on the DDU maintenance screen		OK		Walter Sigudla - 486333	Train
10085	A	On the maintenance software, check that the HVAC mode for M3 corresponds to the status on the DDU Screen. For every 3 minutes the HVAC mode should change between Ventilation, Heating and Cooling		OK		Walter Sigudla - 486333	Train
10086	R	After 9 to 12 minutes, the M3 saloon HVAC test has passed.		OK		Walter Sigudla - 486333	Train
10087	I	If the test has not passed, use the maintenance software to check the alarms recorded during testing to help with fault finding.		OK		Walter Sigudla - 486333	Train
10088	I	HVAC Saloon TC2		OK		Walter Sigudla - 486333	Train
10089	A	Open the Program HCU_finder.exe click on the line where it shows the IP Address for TC2		OK		Walter Sigudla - 486333	Train
10090	A	On the maintenance software web-browser, clear all the alarms and events for TC2 car		OK		Walter Sigudla - 486333	Train
10091	A	Launch the HVAC test for TC2 car on the DDU maintenance screen		OK		Walter Sigudla - 486333	Train
10092	A	On the maintenance software, check that the HVAC mode for TC2 corresponds to the status on the DDU Screen. For every 3 minutes the HVAC mode should change between Ventilation, Heating and Cooling		OK		Walter Sigudla - 486333	Train
10093	R	After 9 to 12 minutes, the TC2 saloon HVAC test has passed.		OK		Walter Sigudla - 486333	Train

10094	I	If the test has not passed, use the maintenance software to check the alarms recorded during testing to help with fault finding.		OK		Walter Sigudla - 486333	Train
10095	A	Launch the HVAC test for the TC2 Cab		OK		Walter Sigudla - 486333	Train
10096	A	On the maintenance software, check that the HVAC mode for TC2 Cab corresponds to the status on the DDU Screen. For every 3 minutes the HVAC mode should change between Ventilation, Heating and Cooling		OK		Walter Sigudla - 486333	Train
10097	R	After 9 to 12 minutes, the TC2 saloon HVAC test has passed.		OK		Walter Sigudla - 486333	Train
10098	I	If the test has not passed, use the maintenance software to check the alarms recorded during testing to help with fault finding.		OK		Walter Sigudla - 486333	Train
10099	I	Cabin HVAC on TC2		OK		Walter Sigudla - 486333	Train
10100	I	Use the temperature sensor to verify the temperature of the cabin		OK		Walter Sigudla - 486333	Train
10101	A	Switch Active cab to TC2		OK		Walter Sigudla - 486333	Train
10102	I	Check the Steps below and compare with Maintenance software		OK		Walter Sigudla - 486333	Train
10103	A	Select the switch 57S1 to Low-Speed Ventilation		OK		Walter Sigudla - 486333	Train
10104	A	Select the switch 57S2 to position 1		OK		Walter Sigudla - 486333	Train
10105	R	Temperature is set to 20°C		OK		Walter Sigudla - 486333	Train
10106	A	Select the switch 57S2 to position 2		OK		Walter Sigudla - 486333	Train
10107	R	Temperature is set to 22°C		OK		Walter Sigudla - 486333	Train
10108	A	Select the switch 57S2 to position 3		OK		Walter Sigudla - 486333	Train
10109	R	Temperature is set to 24°C		OK		Walter Sigudla - 486333	Train
10110	A	Select the switch 57S2 to position 4		OK		Walter Sigudla - 486333	Train

10111	R	Temperature is set to 26°C		OK		Walter Sigudla - 486333	Train
10112	A	Now select the switch '57S1' to High Ventilation		OK		Walter Sigudla - 486333	Train
10113	A	Select the switch '57S2' to position 1		OK		Walter Sigudla - 486333	Train
10114	R	Temperature is set to 20°C		OK		Walter Sigudla - 486333	Train
10115	A	Select the switch '57S2' to position 2		OK		Walter Sigudla - 486333	Train
10116	R	Temperature is set to 22°C		OK		Walter Sigudla - 486333	Train
10117	A	Select the switch '57S2' to position 3		OK		Walter Sigudla - 486333	Train
10118	R	Temperature is set to 24°C		OK		Walter Sigudla - 486333	Train
10119	A	Select the switch '57S2' to position 4		OK		Walter Sigudla - 486333	Train
10120	R	Temperature is set to 26°C		OK		Walter Sigudla - 486333	Train
10121	I	Cabin HVAC Fault on TC2		OK		Walter Sigudla - 486333	Train
10122	A	Select the switch '57S1' to OFF position		OK		Walter Sigudla - 486333	Train
10123	A	Trip the Circuit-Breaker F120 to simulate the fault. Located in HVAC Control Panel		OK		Walter Sigudla - 486333	Train
10124	A	Turn on the cabin HVAC by switch '57S1' and verify on HCU Finder if the operation is according to the selected position		OK		Walter Sigudla - 486333	Train
10125	R	Operation speed selection is working properly		OK		Walter Sigudla - 486333	Train
10126	A	Select the switch '57S1' to OFF position		OK		Walter Sigudla - 486333	Train
10127	A	Normalize the Circuit Breaker F120		OK		Walter Sigudla - 486333	Train
10128	A	Turn on the cabin HVAC by switch '57S1' and check its behaviour.		OK		Walter Sigudla - 486333	Train
10129	I	Cabin Footrest Heater Test on TC2		OK		Walter Sigudla - 486333	Train
10130	R	Read Defined Variable [TT] (MPU1)li_hva_tc2footheaterfault___1 = 0.0		OK	0	Walter Sigudla - 486333	Train

10131	R	Foot Heater is Off		OK		Walter Sigudla - 486333	Train
10132	A	Simulate a failure of the heater by opening circuit breaker 57Q2		OK		Walter Sigudla - 486333	Train
10133	A	Command '57S3' pushbutton		OK		Walter Sigudla - 486333	Train
10134	R	Read Defined Variable [TT] (MPU1)li_hva_tc2footheaterfault___1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10135	R	Foot Heater is Off		OK		Walter Sigudla - 486333	Train
10136	A	Release '57S3' pushbutton		OK		Walter Sigudla - 486333	Train
10137	A	Close 57Q2		OK		Walter Sigudla - 486333	Train
10138	A	Command '57S3' pushbutton		OK		Walter Sigudla - 486333	Train
10139	R	Read Defined Variable [TT] (MPU1)li_hva_tc2footheaterfault___1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10140	R	Foot Heater is ON		OK		Walter Sigudla - 486333	Train
10141	I	Emergency Ventilation Mode		OK		Walter Sigudla - 486333	Train
10142	R	All HVACs are working in NORMAL condition		OK		Walter Sigudla - 486333	Train
10143	A	Switch off the catenary voltage 3kV		OK		Walter Sigudla - 486333	Train
10144	R	Both Auxiliary Converter stop to work		OK		Walter Sigudla - 486333	Train
10145	R	400 V AC is not present on train		OK		Walter Sigudla - 486333	Train
10146	R	No high voltage power is available on HVAC unit to operate Ventilation and Cooling or Heating.		OK		Walter Sigudla - 486333	Train
10147	R	All HVAC units and Cab HVAC units stop		OK		Walter Sigudla - 486333	Train
10148	R	After about 45 seconds without 400V, Auxiliary Converter will generate 400V from Train Batteries with an inverter.		OK		Walter Sigudla - 486333	Train
10149	R	After this time about (45s) All HVAC units will operate in "Emergency Ventilation"		OK		Walter Sigudla - 486333	Train

10150	A	Switch on the 3kV on the catenary		OK		Walter Sigudla - 486333	Train
10151	R	Now, 400V AC is available by Auxiliary Converter		OK		Walter Sigudla - 486333	Train
10152	R	All HVAC units and Cab HVAC units only operate Ventilation with maximum fresh airflow, Air Extractor are switch ON		OK		Walter Sigudla - 486333	Train
10153	I	End of Test		OK		Walter Sigudla - 486333	Train

Section 13 – Driving Command

13.3 Instructions list

13.3.1 030_DRC-Driving Command

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	Driving command = SPP 30		OK		Celiwe Sokhela - 491462	Train
10002	I	Initial Conditions		OK		Celiwe Sokhela - 491462	Train
10003	I	Train should be prepared with High voltage		OK		Celiwe Sokhela - 491462	Train
10004	I	Deadman override switch 60S1 must be in OVERRIDE position		OK		Celiwe Sokhela - 491462	Train
10005	I	Driving command TC1 side		OK		Celiwe Sokhela - 491462	Train
10006	I	Direction Selector Switch TC1		OK		Celiwe Sokhela - 491462	Train
10007	A	Put the Direction selector switch 30A1.S2 in NEUTRAL position		OK		Celiwe Sokhela - 491462	Train
10008	R	Read Defined Variable [TT] (TBCU1)LI_FORWARD = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10009	R	Read Defined Variable [TT] (TBCU2)LI_FORWARD = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10010	R	Read Defined Variable [TT] (TBCU3)LI_FORWARD = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10011	R	Read Defined Variable [TT] (TBCU4)LI_FORWARD = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10012	R	Read Defined Variable [TT] (TBCU1)LI_REVERSE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10013	R	Read Defined Variable [TT] (TBCU2)LI_REVERSE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10014	R	Read Defined Variable [TT] (TBCU3)LI_REVERSE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10015	R	Read Defined Variable [TT] (TBCU4)LI_REVERSE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10016	R	Read Defined Variable [TT] (MPU1)li_drc_tc1dsnozeror1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train

10017	R	Read Defined Variable [TT] (MPU1)li_drc_tc1dsreverser1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10018	A	Put the Direction selector switch 30A1.S2 in FORWARD position		OK		Celiwe Sokhela - 491462	Train
10019	R	Read Defined Variable [TT] (TBCU1)LI_FORWARD = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10020	R	Read Defined Variable [TT] (TBCU2)LI_FORWARD = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10021	R	Read Defined Variable [TT] (TBCU3)LI_FORWARD = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10022	R	Read Defined Variable [TT] (TBCU4)LI_FORWARD = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10023	R	Read Defined Variable [TT] (TBCU1)LI_REVERSE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10024	R	Read Defined Variable [TT] (TBCU2)LI_REVERSE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10025	R	Read Defined Variable [TT] (TBCU3)LI_REVERSE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10026	R	Read Defined Variable [TT] (TBCU4)LI_REVERSE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10027	R	Read Defined Variable [TT] (MPU1)li_drc_tc1dsnozeror1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10028	R	Read Defined Variable [TT] (MPU1)li_drc_tc1dsreverser1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10029	A	Put the Direction selector switch 30A1.S2 in REVERSE position		OK		Celiwe Sokhela - 491462	Train
10030	R	Read Defined Variable [TT] (TBCU1)LI_FORWARD = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10031	R	Read Defined Variable [TT] (TBCU2)LI_FORWARD = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10032	R	Read Defined Variable [TT] (TBCU3)LI_FORWARD = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10033	R	Read Defined Variable [TT] (TBCU4)LI_FORWARD = 0.0		OK	0	Celiwe Sokhela - 491462	Train

10034	R	Read Defined Variable [TT] (TBCU1)LI_REVERSE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10035	R	Read Defined Variable [TT] (TBCU2)LI_REVERSE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10036	R	Read Defined Variable [TT] (TBCU3)LI_REVERSE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10037	R	Read Defined Variable [TT] (TBCU4)LI_REVERSE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10038	R	Read Defined Variable [TT] (MPU1)li_drc_tc1dsnozeror1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10039	R	Read Defined Variable [TT] (MPU1)li_drc_tc1dsreverser1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10040	I	Reduced Power Test TC1		OK		Celiwe Sokhela - 491462	Train
10041	I	Button Lamp 30S2 is OFF		OK		Celiwe Sokhela - 491462	Train
10042	I	Driving mode switch in SPEED CONTROL mode		OK		Celiwe Sokhela - 491462	Train
10043	R	Read Defined Variable [TT] (MPU1)li_drc_tc1reducedpowerr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10044	R	Read Defined Variable [TT] (MPU1)lo_drc_tc1reducedlampr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10045	A	Press button 30S2 to activate the reduced power mode and maintain it		OK		Celiwe Sokhela - 491462	Train
10046	R	Button Lamp 30S2 is ON		OK		Celiwe Sokhela - 491462	Train
10047	R	Read Defined Variable [TT] (MPU1)li_drc_tc1reducedpowerr1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10048	R	Read Defined Variable [TT] (MPU1)lo_drc_tc1reducedlampr1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10049	A	Release the button 30S2 and press it again to de-activate reduced power mode		OK		Celiwe Sokhela - 491462	Train
10050	R	Button Lamp 30S2 is OFF		OK		Celiwe Sokhela - 491462	Train
10051	R	Read Defined Variable [TT] (MPU1)li_drc_tc1reducedpowerr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train

10052	R	Read Defined Variable [TT] (MPU1)lo_drc_tc1reducedlampr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10053	A	Put the driving mode switch to EFFORT mode		OK		Celiwe Sokhela - 491462	Train
10054	A	Press button 30S2 to activate the reduced power mode and maintain it		OK		Celiwe Sokhela - 491462	Train
10055	R	Read Defined Variable [TT] (MPU1)li_drc_tc1reducedpowerr1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10056	R	Read Defined Variable [TT] (MPU1)lo_drc_tc1reducedlampr1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10057	A	Release the button 30S2 and press it again to de-activate reduced power mode		OK		Celiwe Sokhela - 491462	Train
10058	R	Read Defined Variable [TT] (MPU1)li_drc_tc1reducedpowerr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10059	R	Read Defined Variable [TT] (MPU1)lo_drc_tc1reducedlampr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10060	I	It not possible to activate reduced power in depot or coupling mode		OK		Celiwe Sokhela - 491462	Train
10061	A	Put the driving mode switch to DEPOT mode		OK		Celiwe Sokhela - 491462	Train
10062	A	Press button 30S2 to activate the reduced power mode and maintain it		OK		Celiwe Sokhela - 491462	Train
10063	R	Read Defined Variable [TT] (MPU1)lo_drc_tc1reducedlampr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10064	R	Read Defined Variable [TT] (MPU1)li_drc_tc1reducedpowerr1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10065	A	Release the button 30S2		OK		Celiwe Sokhela - 491462	Train
10066	A	Put the driving mode switch to COUPLING mode		OK		Celiwe Sokhela - 491462	Train
10067	A	Press button 30S2 to activate the reduced power mode and maintain it		OK		Celiwe Sokhela - 491462	Train
10068	R	Read Defined Variable [TT] (MPU1)lo_drc_tc1reducedlampr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train

10069	R	Read Defined Variable [TT] (MPU1)li_drc_tc1reducedpowerr1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10070	A	Release the button 30S2		OK		Celiwe Sokhela - 491462	Train
10071	I	Master Controller / No Brake		OK		Celiwe Sokhela - 491462	Train
10072	I	The direction selector switch 30A1.S2 must be in NEUTRAL position		OK		Celiwe Sokhela - 491462	Train
10073	I	The Master controller of Traction/Brake should be on OFF position		OK		Celiwe Sokhela - 491462	Train
10074	R	Read Defined Variable [TT] (MPU1)li_dor_tc1alldoorsclosedr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10075	I	The Traction Interlock Override Switch 31S1 should be in NORMAL position		OK		Celiwe Sokhela - 491462	Train
10076	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10077	R	LED 31H1 is OFF on the alarm module		OK		Celiwe Sokhela - 491462	Train
10078	R	LED 44H4 is "ON" on the alarm module		OK		Celiwe Sokhela - 491462	Train
10079	R	Read Defined Variable [TT] (BCU1)Li_Traction = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10080	R	Read Defined Variable [TT] (BCU2)Li_Traction = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10081	R	Read Defined Variable [TT] (TBCU1)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10082	R	Read Defined Variable [TT] (TBCU2)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10083	R	Read Defined Variable [TT] (TBCU3)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10084	R	Read Defined Variable [TT] (TBCU4)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10085	R	Read Defined Variable [TT] (BCU1)Li_noBrake = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10086	R	Read Defined Variable [TT] (BCU2)Li_noBrake = 1.0		OK	1	Celiwe Sokhela - 491462	Train

10087	R	Read Defined Variable [TT] (TBCU1)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10088	R	Read Defined Variable [TT] (TBCU2)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10089	R	Read Defined Variable [TT] (TBCU3)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10090	R	Read Defined Variable [TT] (TBCU4)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10091	R	Read Min/Max [TT] (MPU1)ai_drc_tc1mcpositionch1 : 5479<= x <= 6369		OK	6048	Celiwe Sokhela - 491462	Train
10092	R	Read Min/Max [TT] (MPU1)ai_drc_tc1mcpositionch2 : 5479<= x <= 6369		OK	5984	Celiwe Sokhela - 491462	Train
10093	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mctractionr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10094	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mctractionr2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10095	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcnocoastr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10096	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcnocoastr2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10097	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcbraker1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10098	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcbraker2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10099	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcemergencybraker1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10100	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcemergencybraker2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10101	A	Put the Direction selector switch 30A1.S2 in FORWARD position		OK		Celiwe Sokhela - 491462	Train
10102	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 0.0		OK	0	Celiwe Sokhela - 491462	Train

10103	R	LED 44H4 is OFF on the alarm module		OK		Celiwe Sokhela - 491462	Train
10104	R	LED 31H1 is "ON" on the alarm module		OK		Celiwe Sokhela - 491462	Train
10105	R	Read Defined Variable [TT] (BCU1)Li_Traction = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10106	R	Read Defined Variable [TT] (BCU2)Li_Traction = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10107	R	Read Defined Variable [TT] (TBCU1)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10108	R	Read Defined Variable [TT] (TBCU2)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10109	R	Read Defined Variable [TT] (TBCU3)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10110	R	Read Defined Variable [TT] (TBCU4)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10111	R	Read Defined Variable [TT] (BCU1)Li_noBrake = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10112	R	Read Defined Variable [TT] (BCU2)Li_noBrake = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10113	R	Read Defined Variable [TT] (TBCU1)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10114	R	Read Defined Variable [TT] (TBCU2)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10115	R	Read Defined Variable [TT] (TBCU3)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10116	R	Read Defined Variable [TT] (TBCU4)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10117	R	Read Min/Max [TT] (MPU1)ai_drc_tc1mcpositionch1 : 5479<= x <= 6369		OK	6048	Celiwe Sokhela - 491462	Train
10118	R	Read Min/Max [TT] (MPU1)ai_drc_tc1mcpositionch2 : 5479<= x <= 6369		OK	5984	Celiwe Sokhela - 491462	Train
10119	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mctractionr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train

10120	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mctractionr2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10121	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcnocoastr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10122	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcnocoastr2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10123	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcbraker1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10124	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcbraker2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10125	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcemergencybraker1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10126	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcemergencybraker2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10127	I	For safety purposes ENSURE that NO one is working NEAR, OUTSIDE or on the DOORS of the Train		OK		Celiwe Sokhela - 491462	Train
10128	A	Press Automatic Start Button to Drop the Pantographs		OK		Celiwe Sokhela - 491462	Train
10129	A	Timer 15.0 S		OK		Celiwe Sokhela - 491462	Train
10130	R	Read Defined Variable [TT] (MPU1)li_pnt_m1pantorisedr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10131	R	Read Defined Variable [TT] (MPU1)li_pnt_m1pantorisedr2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10132	R	Read Defined Variable [TT] (MPU1)li_pnt_m2pantorisedr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10133	R	Read Defined Variable [TT] (MPU1)li_pnt_m2pantorisedr2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10134	A	Put the Master controller of Traction/Brake in 100% TRACTION position		OK		Celiwe Sokhela - 491462	Train
10135	R	Read Defined Variable [TT] (BCU1)Li_Traction = 1.0		OK	1	Celiwe Sokhela - 491462	Train

10136	R	Read Defined Variable [TT] (BCU2)Li_Traction = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10137	R	Read Defined Variable [TT] (TBCU1)LI_TRACTION = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10138	R	Read Defined Variable [TT] (TBCU2)LI_TRACTION = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10139	R	Read Defined Variable [TT] (TBCU3)LI_TRACTION = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10140	R	Read Defined Variable [TT] (TBCU4)LI_TRACTION = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10141	R	Read Defined Variable [TT] (BCU1)Li_noBrake = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10142	R	Read Defined Variable [TT] (BCU2)Li_noBrake = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10143	R	Read Defined Variable [TT] (TBCU1)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10144	R	Read Defined Variable [TT] (TBCU2)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10145	R	Read Defined Variable [TT] (TBCU3)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10146	R	Read Defined Variable [TT] (TBCU4)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10147	R	Read Min/Max [TT] (MPU1)ai_drc_tc1mcpositionch1 : 29183<= x <= 31102		OK	30896	Celiwe Sokhela - 491462	Train
10148	R	Read Min/Max [TT] (MPU1)ai_drc_tc1mcpositionch2 : 29183<= x <= 31102		OK	30912	Celiwe Sokhela - 491462	Train
10149	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mctractionr1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10150	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mctractionr2 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10151	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcnocoastr1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10152	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcnocoastr2 = 1.0		OK	1	Celiwe Sokhela - 491462	Train

10153	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcbraker1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10154	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcbraker2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10155	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcemergencybraker1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10156	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcemergencybraker2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10157	A	Put the Master controller of Traction/Brake in OFF position		OK		Celiwe Sokhela - 491462	Train
10158	R	Read Defined Variable [TT] (BCU1)Li_Traction = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10159	R	Read Defined Variable [TT] (BCU2)Li_Traction = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10160	R	Read Defined Variable [TT] (TBCU1)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10161	R	Read Defined Variable [TT] (TBCU2)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10162	R	Read Defined Variable [TT] (TBCU3)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10163	R	Read Defined Variable [TT] (TBCU4)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10164	R	Read Defined Variable [TT] (BCU1)Li_noBrake = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10165	R	Read Defined Variable [TT] (BCU2)Li_noBrake = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10166	R	Read Defined Variable [TT] (TBCU1)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10167	R	Read Defined Variable [TT] (TBCU2)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10168	R	Read Defined Variable [TT] (TBCU3)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10169	R	Read Defined Variable [TT] (TBCU4)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train

10170	R	Read Min/Max [TT] (MPU1)ai_drc_tc1mcpositionch1 : 5479<= x <= 6369		OK	6048	Celiwe Sokhela - 491462	Train
10171	R	Read Min/Max [TT] (MPU1)ai_drc_tc1mcpositionch2 : 5479<= x <= 6369		OK	5984	Celiwe Sokhela - 491462	Train
10172	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mctractionr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10173	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mctractionr2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10174	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcnocoastr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10175	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcnocoastr2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10176	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcbraker1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10177	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcbraker2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10178	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcemergencybraker1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10179	A	Put the direction selector switch in REVERSE position		OK		Celiwe Sokhela - 491462	Train
10180	A	Put the Master controller of Traction/Brake in 100% BRAKE position		OK		Celiwe Sokhela - 491462	Train
10181	R	Read Defined Variable [TT] (BCU1)Li_Traction = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10182	R	Read Defined Variable [TT] (BCU2)Li_Traction = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10183	R	Read Defined Variable [TT] (TBCU1)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10184	R	Read Defined Variable [TT] (TBCU2)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10185	R	Read Defined Variable [TT] (TBCU3)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train

10186	R	Read Defined Variable [TT] (TBCU4)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10187	R	Read Defined Variable [TT] (BCU1)Li_noBrake = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10188	R	Read Defined Variable [TT] (BCU2)Li_noBrake = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10189	R	Read Defined Variable [TT] (TBCU1)LI_NOBRAKE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10190	R	Read Defined Variable [TT] (TBCU2)LI_NOBRAKE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10191	R	Read Defined Variable [TT] (TBCU3)LI_NOBRAKE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10192	R	Read Defined Variable [TT] (TBCU4)LI_NOBRAKE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10193	R	Read Min/Max [TT] (MPU1)ai_drc_tc1mcpositionch1 : 29183<= x <= 31102		OK	30896	Celiwe Sokhela - 491462	Train
10194	R	Read Min/Max [TT] (MPU1)ai_drc_tc1mcpositionch2 : 29183<= x <= 31102		OK	30928	Celiwe Sokhela - 491462	Train
10195	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mctractionr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10196	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mctractionr2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10197	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcnocoastr1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10198	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcnocoastr2 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10199	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcbraker1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10200	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcbraker2 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10201	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcemergencybraker1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10202	R	Read Defined Variable [TT]		OK	0	Celiwe Sokhela - 491462	Train

		(MPU1)li_drc_tc1mcemergencybraker2 = 0.0					
10203	A	Put the Master controller of Traction/Brake in EMERGENCY BRAKE position		OK		Celiwe Sokhela - 491462	Train
10204	R	Read Defined Variable [TT] (BCU1)Li_Traction = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10205	R	Read Defined Variable [TT] (BCU2)Li_Traction = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10206	R	Read Defined Variable [TT] (TBCU1)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10207	R	Read Defined Variable [TT] (TBCU2)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10208	R	Read Defined Variable [TT] (TBCU3)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10209	R	Read Defined Variable [TT] (TBCU4)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10210	R	Read Defined Variable [TT] (BCU1)Li_noBrake = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10211	R	Read Defined Variable [TT] (BCU2)Li_noBrake = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10212	R	Read Defined Variable [TT] (TBCU1)LI_NOBRAKE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10213	R	Read Defined Variable [TT] (TBCU2)LI_NOBRAKE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10214	R	Read Defined Variable [TT] (TBCU3)LI_NOBRAKE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10215	R	Read Defined Variable [TT] (TBCU4)LI_NOBRAKE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10216	R	Read Min/Max [TT] (MPU1)ai_drc_tc1mcpositionch1 : 29183<= x <= 31102		OK	30912	Celiwe Sokhela - 491462	Train
10217	R	Read Min/Max [TT] (MPU1)ai_drc_tc1mcpositionch2 : 29183<= x <= 31102		OK	30928	Celiwe Sokhela - 491462	Train
10218	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mctractionr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train

10219	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mctractionr2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10220	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcnocoastr1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10221	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcnocoastr2 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10222	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcbraker1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10223	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcbraker2 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10224	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcemergencybraker1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10225	R	Read Defined Variable [TT] (MPU1)li_drc_tc1mcemergencybraker2 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10226	I	Driving command TC2 side		OK		Celiwe Sokhela - 491462	Train
10227	I	Direction Selector Switch TC2		OK		Celiwe Sokhela - 491462	Train
10228	A	Switch active cab to TC2		OK		Celiwe Sokhela - 491462	Train
10229	A	Press 21S1 to raise the Pantographs		OK		Celiwe Sokhela - 491462	Train
10230	A	Press 22S11 to close the HSCB		OK		Celiwe Sokhela - 491462	Train
10231	A	Put the Direction selector switch 30A1.S2 in NEUTRAL position		OK		Celiwe Sokhela - 491462	Train
10232	R	Read Defined Variable [TT] (TBCU1)LI_FORWARD = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10233	R	Read Defined Variable [TT] (TBCU2)LI_FORWARD = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10234	R	Read Defined Variable [TT] (TBCU3)LI_FORWARD = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10235	R	Read Defined Variable [TT] (TBCU4)LI_FORWARD = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10236	R	Read Defined Variable [TT] (TBCU1)LI_REVERSE = 0.0		OK	0	Celiwe Sokhela - 491462	Train

10237	R	Read Defined Variable [TT] (TBCU2)LI_REVERSE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10238	R	Read Defined Variable [TT] (TBCU3)LI_REVERSE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10239	R	Read Defined Variable [TT] (TBCU4)LI_REVERSE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10240	A	Put the Direction selector switch 30A1.S2 in FORWARD position		OK		Celiwe Sokhela - 491462	Train
10241	R	Read Defined Variable [TT] (TBCU1)LI_FORWARD = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10242	R	Read Defined Variable [TT] (TBCU2)LI_FORWARD = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10243	R	Read Defined Variable [TT] (TBCU3)LI_FORWARD = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10244	R	Read Defined Variable [TT] (TBCU4)LI_FORWARD = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10245	R	Read Defined Variable [TT] (TBCU1)LI_REVERSE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10246	R	Read Defined Variable [TT] (TBCU2)LI_REVERSE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10247	R	Read Defined Variable [TT] (TBCU3)LI_REVERSE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10248	R	Read Defined Variable [TT] (TBCU4)LI_REVERSE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10249	A	Put the Direction selector switch 30A1.S2 in REVERSE position		OK		Celiwe Sokhela - 491462	Train
10250	R	Read Defined Variable [TT] (TBCU1)LI_FORWARD = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10251	R	Read Defined Variable [TT] (TBCU2)LI_FORWARD = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10252	R	Read Defined Variable [TT] (TBCU3)LI_FORWARD = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10253	R	Read Defined Variable [TT] (TBCU4)LI_FORWARD = 1.0		OK	1	Celiwe Sokhela - 491462	Train

10254	R	Read Defined Variable [TT] (TBCU1)LI_REVERSE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10255	R	Read Defined Variable [TT] (TBCU2)LI_REVERSE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10256	R	Read Defined Variable [TT] (TBCU3)LI_REVERSE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10257	R	Read Defined Variable [TT] (TBCU4)LI_REVERSE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10258	A	Put Master Controller in OFF position		OK		Celiwe Sokhela - 491462	Train
10259	I	Button Lamp 30S2 is OFF		OK		Celiwe Sokhela - 491462	Train
10260	I	Reduced Power Test TC2		OK		Celiwe Sokhela - 491462	Train
10261	A	Put the driving mode switch in SPEED CONTROL mode		OK		Celiwe Sokhela - 491462	Train
10262	A	Press button 30S2 to activate the reduced power mode and maintain it		OK		Celiwe Sokhela - 491462	Train
10263	R	Read Defined Variable [TT] (MPU1)li_drc_tc2reducedpowerr1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10264	R	Read Defined Variable [TT] (MPU1)lo_drc_tc2reducedlampr1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10265	R	Button Lamp 30S2 is ON		OK		Celiwe Sokhela - 491462	Train
10266	A	Release the button 30S2 and press it again to de-activate reduced power mode		OK		Celiwe Sokhela - 491462	Train
10267	R	Button Lamp 30S2 is OFF		OK		Celiwe Sokhela - 491462	Train
10268	R	Read Defined Variable [TT] (MPU1)li_drc_tc2reducedpowerr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10269	R	Read Defined Variable [TT] (MPU1)lo_drc_tc2reducedlampr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10270	A	Put the driving mode switch to EFFORT mode		OK		Celiwe Sokhela - 491462	Train
10271	A	Press button 30S2 to activate the reduced power mode and maintain it		OK		Celiwe Sokhela - 491462	Train

10272	R	Read Defined Variable [TT] (MPU1)li_drc_tc2reducedpowerr1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10273	R	Read Defined Variable [TT] (MPU1)lo_drc_tc2reducedlampr1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10274	A	Release the button 30S2 and press it again to de-activate reduced power mode		OK		Celiwe Sokhela - 491462	Train
10275	R	Read Defined Variable [TT] (MPU1)lo_drc_tc2reducedlampr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10276	I	It not possible to activate reduced power in depot or coupling mode		OK		Celiwe Sokhela - 491462	Train
10277	A	Put the driving mode switch to DEPOT mode		OK		Celiwe Sokhela - 491462	Train
10278	A	Press button 30S2 to activate the reduced power mode and maintain it		OK		Celiwe Sokhela - 491462	Train
10279	R	Read Defined Variable [TT] (MPU1)lo_drc_tc2reducedlampr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10280	R	Read Defined Variable [TT] (MPU1)li_drc_tc2reducedpowerr1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10281	A	Release the button 30S2		OK		Celiwe Sokhela - 491462	Train
10282	A	Put the driving mode switch to COUPLING mode		OK		Celiwe Sokhela - 491462	Train
10283	A	Press button 30S2 to activate the reduced power mode and maintain it		OK		Celiwe Sokhela - 491462	Train
10284	R	Read Defined Variable [TT] (MPU1)li_drc_tc2reducedpowerr1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10285	R	Read Defined Variable [TT] (MPU1)lo_drc_tc2reducedlampr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10286	A	Release the button 30S2		OK		Celiwe Sokhela - 491462	Train
10287	I	Master Controller/ No Brake		OK		Celiwe Sokhela - 491462	Train
10288	I	The direction selector switch 30A1.S2 must be in NEUTRAL position		OK		Celiwe Sokhela - 491462	Train
10289	I	The Master controller of Traction/Brake should be on OFF position		OK		Celiwe Sokhela - 491462	Train

10290	I	Emergency Brake must be applied		OK		Celiwe Sokhela - 491462	Train
10291	I	All doors should be closed		OK		Celiwe Sokhela - 491462	Train
10292	I	The Traction Interlock Override Switch 31S1 should be in NORMAL position		OK		Celiwe Sokhela - 491462	Train
10293	R	LED 31H1 is OFF on the alarm module		OK		Celiwe Sokhela - 491462	Train
10294	R	LED 44H4 is "ON" on the alarm module		OK		Celiwe Sokhela - 491462	Train
10295	R	Read Defined Variable [TT] (BCU1)Li_Traction = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10296	R	Read Defined Variable [TT] (BCU2)Li_Traction = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10297	R	Read Defined Variable [TT] (TBCU1)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10298	R	Read Defined Variable [TT] (TBCU2)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10299	R	Read Defined Variable [TT] (TBCU3)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10300	R	Read Defined Variable [TT] (TBCU4)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10301	R	Read Defined Variable [TT] (BCU1)Li_noBrake = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10302	R	Read Defined Variable [TT] (BCU2)Li_noBrake = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10303	R	Read Defined Variable [TT] (TBCU1)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10304	R	Read Defined Variable [TT] (TBCU2)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10305	R	Read Defined Variable [TT] (TBCU3)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10306	R	Read Defined Variable [TT] (TBCU4)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10307	R	Read Min/Max [TT] (MPU1)ai_drc_tc2mcpositionch1 : 5479<= x <= 6369		OK	5952	Celiwe Sokhela - 491462	Train

10308	R	Read Min/Max [TT] (MPU1)ai_drc_tc2mcpositionch2 : 5479<= x <= 6369		OK	5984	Celiwe Sokhela - 491462	Train
10309	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mctractionr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10310	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mctractionr2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10311	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcnocoastr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10312	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcnocoastr2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10313	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcbraker1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10314	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcbraker2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10315	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcemergencybraker1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10316	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcemergencybraker2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10317	A	Put the Direction selector switch 30A1.S2 in FORWARD position		OK		Celiwe Sokhela - 491462	Train
10318	I	No emergency brake is applied		OK		Celiwe Sokhela - 491462	Train
10319	R	LED 44H4 is OFF on the alarm module		OK		Celiwe Sokhela - 491462	Train
10320	R	LED 31H1 is "ON" on the alarm module		OK		Celiwe Sokhela - 491462	Train
10321	R	Relay 31K1 and 31K2 are energized		OK		Celiwe Sokhela - 491462	Train
10322	R	Read Defined Variable [TT] (BCU1)Li_Traction = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10323	R	Read Defined Variable [TT] (BCU2)Li_Traction = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10324	R	Read Defined Variable [TT] (TBCU1)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train

10325	R	Read Defined Variable [TT] (TBCU2)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10326	R	Read Defined Variable [TT] (TBCU3)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10327	R	Read Defined Variable [TT] (TBCU4)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10328	R	Read Defined Variable [TT] (BCU1)Li_noBrake = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10329	R	Read Defined Variable [TT] (BCU2)Li_noBrake = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10330	R	Read Defined Variable [TT] (TBCU1)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10331	R	Read Defined Variable [TT] (TBCU2)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10332	R	Read Defined Variable [TT] (TBCU3)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10333	R	Read Defined Variable [TT] (TBCU4)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10334	R	Read Min/Max [TT] (MPU1)ai_drc_tc2mcpositionch1 : 5479<= x <= 6369		OK	5952	Celiwe Sokhela - 491462	Train
10335	R	Read Min/Max [TT] (MPU1)ai_drc_tc2mcpositionch2 : 5479<= x <= 6369		OK	5984	Celiwe Sokhela - 491462	Train
10336	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mctractionr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10337	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mctractionr2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10338	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcnocoastr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10339	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcnocoastr2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10340	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcbraker1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10341	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcbraker2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train

10342	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcemergencybraker1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10343	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcemergencybraker2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10344	I	For safety purposes ENSURE that NO one is working NEAR, OUTSIDE or on the DOORS of the Train		OK		Celiwe Sokhela - 491462	Train
10345	A	Press Automatic Start Button to Drop the Pantographs		OK		Celiwe Sokhela - 491462	Train
10346	A	Timer 15.0 S		OK		Celiwe Sokhela - 491462	Train
10347	R	Read Defined Variable [TT] (MPU1)li_pnt_m1pantorisedr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10348	R	Read Defined Variable [TT] (MPU1)li_pnt_m1pantorisedr2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10349	R	Read Defined Variable [TT] (MPU1)li_pnt_m2pantorisedr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10350	R	Read Defined Variable [TT] (MPU1)li_pnt_m2pantorisedr2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10351	A	Put the Master controller of Traction/Brake in 100% TRACTION position		OK		Celiwe Sokhela - 491462	Train
10352	R	Read Defined Variable [TT] (BCU1)Li_Traction = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10353	R	Read Defined Variable [TT] (BCU2)Li_Traction = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10354	R	Read Defined Variable [TT] (TBCU1)LI_TRACTION = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10355	R	Read Defined Variable [TT] (TBCU2)LI_TRACTION = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10356	R	Read Defined Variable [TT] (TBCU3)LI_TRACTION = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10357	R	Read Defined Variable [TT] (TBCU4)LI_TRACTION = 1.0		OK	1	Celiwe Sokhela - 491462	Train

10358	R	Read Defined Variable [TT] (BCU1)Li_noBrake = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10359	R	Read Defined Variable [TT] (BCU2)Li_noBrake = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10360	R	Read Defined Variable [TT] (TBCU1)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10361	R	Read Defined Variable [TT] (TBCU2)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10362	R	Read Defined Variable [TT] (TBCU3)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10363	R	Read Defined Variable [TT] (TBCU4)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10364	R	Read Min/Max [TT] (MPU1)ai_drc_tc2mcpositionch1 : 29183<= x <= 31102		OK	30912	Celiwe Sokhela - 491462	Train
10365	R	Read Min/Max [TT] (MPU1)ai_drc_tc2mcpositionch2 : 29183<= x <= 31102		OK	30928	Celiwe Sokhela - 491462	Train
10366	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mctractionr1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10367	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mctractionr2 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10368	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcnocoastr1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10369	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcnocoastr2 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10370	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcbraker1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10371	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcbraker2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10372	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcemergencybraker1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10373	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcemergencybraker2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train

10374	A	Put the Master controller of Traction/Brake in OFF position		OK		Celiwe Sokhela - 491462	Train
10375	R	Read Defined Variable [TT] (BCU1)Li_Traction = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10376	R	Read Defined Variable [TT] (BCU2)Li_Traction = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10377	R	Read Defined Variable [TT] (TBCU1)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10378	R	Read Defined Variable [TT] (TBCU2)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10379	R	Read Defined Variable [TT] (TBCU3)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10380	R	Read Defined Variable [TT] (TBCU4)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10381	R	Read Defined Variable [TT] (BCU1)Li_noBrake = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10382	R	Read Defined Variable [TT] (BCU2)Li_noBrake = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10383	R	Read Defined Variable [TT] (TBCU1)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10384	R	Read Defined Variable [TT] (TBCU2)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10385	R	Read Defined Variable [TT] (TBCU3)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10386	R	Read Defined Variable [TT] (TBCU4)LI_NOBRAKE = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10387	R	Read Min/Max [TT] (MPU1)ai_drc_tc2mcpositionch1 : 5479<= x <= 6369		OK	5952	Celiwe Sokhela - 491462	Train
10388	R	Read Min/Max [TT] (MPU1)ai_drc_tc2mcpositionch2 : 5479<= x <= 6369		OK	5984	Celiwe Sokhela - 491462	Train
10389	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mctractionr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10390	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mctractionr2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train

10391	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcnocoastr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10392	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcnocoastr2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10393	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcbraker1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10394	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcbraker2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10395	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcemergencybraker1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10396	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcemergencybraker2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10397	A	Put the Master controller of Traction/Brake in 100% BRAKE position		OK		Celiwe Sokhela - 491462	Train
10398	R	Read Defined Variable [TT] (BCU1)Li_Traction = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10399	R	Read Defined Variable [TT] (BCU2)Li_Traction = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10400	R	Read Defined Variable [TT] (TBCU1)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10401	R	Read Defined Variable [TT] (TBCU2)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10402	R	Read Defined Variable [TT] (TBCU3)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10403	R	Read Defined Variable [TT] (TBCU4)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10404	R	Read Defined Variable [TT] (BCU1)Li_noBrake = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10405	R	Read Defined Variable [TT] (BCU2)Li_noBrake = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10406	R	Read Defined Variable [TT] (TBCU1)LI_NOBRAKE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10407	R	Read Defined Variable [TT] (TBCU2)LI_NOBRAKE = 0.0		OK	0	Celiwe Sokhela - 491462	Train

10408	R	Read Defined Variable [TT] (TBCU3)LI_NOBRAKE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10409	R	Read Defined Variable [TT] (TBCU4)LI_NOBRAKE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10410	R	Read Min/Max [TT] (MPU1)ai_drc_tc2mcpositionch1 : 29183<= x <= 31102		OK	30912	Celiwe Sokhela - 491462	Train
10411	R	Read Min/Max [TT] (MPU1)ai_drc_tc2mcpositionch2 : 29183<= x <= 31102		OK	30832	Celiwe Sokhela - 491462	Train
10412	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mctractionr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10413	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mctractionr2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10414	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcnocoastr1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10415	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcnocoastr2 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10416	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcbraker1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10417	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcbraker2 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10418	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcemergencybraker1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10419	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcemergencybraker2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10420	A	Put the Master controller of Traction/Brake in EMERGENCY BRAKE position		OK		Celiwe Sokhela - 491462	Train
10421	R	Read Defined Variable [TT] (BCU1)Li_Traction = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10422	R	Read Defined Variable [TT] (BCU2)Li_Traction = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10423	R	Read Defined Variable [TT] (TBCU1)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train

10424	R	Read Defined Variable [TT] (TBCU2)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10425	R	Read Defined Variable [TT] (TBCU3)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10426	R	Read Defined Variable [TT] (TBCU4)LI_TRACTION = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10427	R	Read Defined Variable [TT] (BCU1)Li_noBrake = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10428	R	Read Defined Variable [TT] (BCU2)Li_noBrake = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10429	R	Read Defined Variable [TT] (TBCU1)LI_NOBRAKE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10430	R	Read Defined Variable [TT] (TBCU2)LI_NOBRAKE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10431	R	Read Defined Variable [TT] (TBCU3)LI_NOBRAKE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10432	R	Read Defined Variable [TT] (TBCU4)LI_NOBRAKE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10433	R	Read Min/Max [TT] (MPU1)ai_drc_tc2mcpositionch1 : 29183<= x <= 31102		OK	30928	Celiwe Sokhela - 491462	Train
10434	R	Read Min/Max [TT] (MPU1)ai_drc_tc2mcpositionch2 : 29183<= x <= 31102		OK	30944	Celiwe Sokhela - 491462	Train
10435	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mctractionr1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10436	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mctractionr2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10437	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcnocoastr1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10438	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcnocoastr2 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10439	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcbraker1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10440	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcbraker2 = 1.0		OK	1	Celiwe Sokhela - 491462	Train

10441	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcemergencybraker1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10442	R	Read Defined Variable [TT] (MPU1)li_drc_tc2mcemergencybraker2 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10443	A	Put the Master controller of Traction/Brake in OFF position		OK		Celiwe Sokhela - 491462	Train
10444	A	Put the direction switch to NEUTRAL position		OK		Celiwe Sokhela - 491462	Train
10445	A	Close HSCB using button 22S11		OK		Celiwe Sokhela - 491462	Train
10446	I	End of Test		OK		Celiwe Sokhela - 491462	Train

Section 14 – Holding and Parking Brake

14.3 Instructions list

14.3.1 045_PBK-Holding and Parking Brake

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	Parking brake SPP= 045		OK		Celiwe Sokhela - 491462	Train
10002	I	Initial Conditions		OK		Celiwe Sokhela - 491462	Train
10003	I	Train must be properly scotched with sufficient scotch blocked to prevent it from moving		OK		Celiwe Sokhela - 491462	Train
10004	I	Automatic parking brake application		OK		Celiwe Sokhela - 491462	Train
10005	I	Train in LV ready with active cab on TC1		OK		Celiwe Sokhela - 491462	Train
10006	A	Release parking brake using the switch 45S1		OK		Celiwe Sokhela - 491462	Train
10007	R	Verify on the DDU that all cars have parking brake released		OK		Celiwe Sokhela - 491462	Train
10008	A	Force [TT] (MPU1)lo_air_tc1compenabler1 = 0.0		OK		Celiwe Sokhela - 491462	Train
10009	A	Force [TT] (MPU1)lo_air_tc1compenabler2 = 0.0		OK		Celiwe Sokhela - 491462	Train
10010	A	Force [TT] (MPU1)lo_air_tc2compenabler1 = 0.0		OK		Celiwe Sokhela - 491462	Train
10011	A	Force [TT] (MPU1)lo_air_tc2compenabler2 = 0.0		OK		Celiwe Sokhela - 491462	Train
10012	A	Drain the air from the main pipe until it reaches 0bar		OK		Celiwe Sokhela - 491462	Train
10013	R	Main pipe pressure is 0bar on the Pneumatic indicator		OK		Celiwe Sokhela - 491462	Train
10014	R	Verify on the DDU that all cars have parking brake applied		OK		Celiwe Sokhela - 491462	Train
10015	R	Lamp 45H2 is "ON" on the alarm module		OK		Celiwe Sokhela - 491462	Train
10016	R	Read Defined Variable [TT] (MPU1)tbcu2_parkbrakerelease = 0.0		OK	0	Alleta Sekgololo - 417407	Train

10017	R	Read Defined Variable [TT] (MPU1)TBCU1_parkbrakerelease = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10018	R	Read Defined Variable [TT] (MPU1)bcu1_parkbrakerelease = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10019	R	Read Defined Variable [TT] (MPU1)BCU2_ParkBrakeRelease = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10020	R	Read Defined Variable [TT] (MPU1)tbcu3_parkbrakerelease = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10021	R	Read Defined Variable [TT] (MPU1)tbcu4_parkbrakerelease = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10022	R	Read Defined Variable [TT] (MPU1)tbcu1_li_pbrake_stat = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10023	R	Read Defined Variable [TT] (MPU1)tbcu2_li_pbrake_stat = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10024	R	Read Defined Variable [TT] (MPU1)tbcu3_li_pbrake_stat = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10025	R	Read Defined Variable [TT] (MPU1)tbcu4_li_pbrake_stat = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10026	R	Read Defined Variable [TT] (MPU1)BCU2_ParkBrakeIsolDC = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10027	R	Read Defined Variable [TT] (MPU1)TBCU1_parkbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10028	R	Read Defined Variable [TT] (MPU1)tbcu2_parkbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10029	R	Read Defined Variable [TT] (MPU1)bcu1_parkbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10030	R	Read Defined Variable [TT] (MPU1)tbcu3_parkbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10031	R	Read Defined Variable [TT] (MPU1)tbcu4_parkbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10032	R	Read Defined Variable [TT] (BCU1)LI_PARK_BR_DC = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10033	R	Read Defined Variable [TT] (BCU2)LI_PARK_BR_DC = 0.0		OK	0	Alleta Sekgololo - 417407	Train

10034	R	Read Defined Variable [TT] (TBCU1)LI_PARK_BR_RELEASE = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10035	R	Read Defined Variable [TT] (TBCU2)LI_PARK_BR_DC = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10036	R	Read Defined Variable [TT] (TBCU3)LI_PARK_BR_DC = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10037	R	Read Defined Variable [TT] (TBCU4)LI_PARK_BR_DC = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10038	A	Release [TT] (MPU1)lo_air_tc1compenabler1		OK		Alleta Sekgololo - 417407	Train
10039	A	Release [TT] (MPU1)lo_air_tc1compenabler2		OK		Alleta Sekgololo - 417407	Train
10040	A	Release [TT] (MPU1)lo_air_tc2compenabler1		OK		Alleta Sekgololo - 417407	Train
10041	A	Release [TT] (MPU1)lo_air_tc2compenabler2		OK		Alleta Sekgololo - 417407	Train
10042	A	Press the automatic start button 20S1		OK		Celiwe Sokhela - 491462	Train
10043	R	Read Defined Variable [TT] (MPU1)lo_air_tc1compenabler1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10044	R	Read Defined Variable [TT] (MPU1)lo_air_tc2compenabler1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10045	R	After 10 minutes, the air in the main pipe is 10bar +/-0.2bar		OK		Celiwe Sokhela - 491462	Train
10046	A	Turn the switch 45S1 to release parking brake		OK		Celiwe Sokhela - 491462	Train
10047	R	Lamp 45H2 is OFF on the alarm module		OK		Celiwe Sokhela - 491462	Train
10048	I	Parking brake is released in all cars		OK		Celiwe Sokhela - 491462	Train
10049	R	Lamp 45H2 is OFF on the alarm module		OK		Celiwe Sokhela - 491462	Train
10050	R	On the Driver's event list, there is no message reporting parking brake release failure		OK		Celiwe Sokhela - 491462	Train
10051	R	Read Defined Variable [TT] (MPU1)tbcu2_parkbrakerelease = 1.0		OK	1	Celiwe Sokhela - 491462	Train

10052	R	Read Defined Variable [TT] (MPU1)TBCU1_parkbrakerelease = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10053	R	Read Defined Variable [TT] (MPU1)bcu1_parkbrakerelease = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10054	R	Read Defined Variable [TT] (MPU1)BCU2_ParkBrakeRelease = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10055	R	Read Defined Variable [TT] (MPU1)tbcu3_parkbrakerelease = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10056	R	Read Defined Variable [TT] (MPU1)tbcu4_parkbrakerelease = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10057	R	Read Defined Variable [TT] (MPU1)tbcu1_li_pbrake_stat = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10058	R	Read Defined Variable [TT] (MPU1)tbcu2_li_pbrake_stat = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10059	R	Read Defined Variable [TT] (MPU1)tbcu3_li_pbrake_stat = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10060	R	Read Defined Variable [TT] (MPU1)tbcu4_li_pbrake_stat = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10061	R	Read Defined Variable [TT] (MPU1)BCU2_ParkBrakeIsolDC = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10062	R	Read Defined Variable [TT] (MPU1)TBCU1_parkbrakeisoldc = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10063	R	Read Defined Variable [TT] (MPU1)tbcu2_parkbrakeisoldc = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10064	R	Read Defined Variable [TT] (MPU1)bcu1_parkbrakeisoldc = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10065	R	Read Defined Variable [TT] (MPU1)tbcu3_parkbrakeisoldc = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10066	R	Read Defined Variable [TT] (MPU1)tbcu4_parkbrakeisoldc = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10067	R	Read Defined Variable [TT] (BCU1)LI_PARK_BR_DC = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10068	R	Read Defined Variable [TT] (BCU2)LI_PARK_BR_DC = 0.0		OK	0	Celiwe Sokhela - 491462	Train

10069	R	Read Defined Variable [TT] (TBCU1)LI_PARK_BR_DC = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10070	R	Read Defined Variable [TT] (TBCU2)LI_PARK_BR_DC = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10071	R	Read Defined Variable [TT] (TBCU3)LI_PARK_BR_DC = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10072	R	Read Defined Variable [TT] (TBCU4)LI_PARK_BR_DC = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10073	I	Remote parking brake application TC1		OK		Celiwe Sokhela - 491462	Train
10074	A	Turn the switch 45S1 to parking brake release		OK		Celiwe Sokhela - 491462	Train
10075	R	Lamp 45H2 is OFF on the alarm module		OK		Celiwe Sokhela - 491462	Train
10076	R	Measure the pressure of the test point C1.11 on TC1, test point must be set to 6 bar Read Undefined Value : x ()		OK	6.884	Celiwe Sokhela - 491462	Train
10077	R	Measure the pressure of the test point C2.11 on M4, test point must be set to 6 bar Read Undefined Value : x ()		OK	6.121	Celiwe Sokhela - 491462	Train
10078	R	Measure the pressure of the test point C2.11 on M1, test point must be set to 6 bar Read Undefined Value : x ()		OK	5.992	Celiwe Sokhela - 491462	Train
10079	R	Measure the pressure of the test point C2.11 on M2, test point must be set to 6 bar Read Undefined Value : x ()		OK	6.064	Celiwe Sokhela - 491462	Train
10080	R	Measure the pressure of the test point C2.11 on M3, test point must be set to 6 bar Read Undefined Value : x ()		OK	5.843	Celiwe Sokhela - 491462	Train
10081	R	Measure the pressure of the test point C1.11 on TC2, test point must be set to 6 bar Read Undefined Value : x ()		OK	6.108	Celiwe Sokhela - 491462	Train
10082	A	Turn the switch 45S1 to apply parking brake		OK		Celiwe Sokhela - 491462	Train
10083	R	Lamp 45H2 is ON on the alarm module		OK		Celiwe Sokhela - 491462	Train
10084	R	Measure the pressure of the test point C1.11 on TC1, test point must below 4.8 bar Result Max : x <= 5 (Bar)		OK	1.744	Celiwe Sokhela - 491462	Train

10085	R	Measure the pressure of the test point C1.11 on M4, test point must below 4.8 bar Result Max : x <= 5 (Bar)		OK	1.987	Celiwe Sokhela - 491462	Train
10086	R	Measure the pressure of the test point C2.11 on M1, test point must below 4.8 bar Result Max : x <= 5 (Bar)		OK	2.083	Celiwe Sokhela - 491462	Train
10087	R	Measure the pressure of the test point C2.11 on M2, test point must below 4.8 bar Result Max : x <= 5 (Bar)		OK	1.946	Celiwe Sokhela - 491462	Train
10088	R	Measure the pressure of the test point C2.11 on M3, test point must below 4.8 bar Result Max : x <= 5 (Bar)		OK	1.921	Celiwe Sokhela - 491462	Train
10089	R	Measure the pressure of the test point C1.11 on TC2, test point must below 4.8 bar Result Max : x <= 5 (Bar)		OK	1.838	Celiwe Sokhela - 491462	Train
10090	R	Read Defined Variable [TT] (MPU1)tbcu2_parkbrakerelease = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10091	R	Read Defined Variable [TT] (MPU1)TBCU1_parkbrakerelease = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10092	R	Read Defined Variable [TT] (MPU1)bcu1_parkbrakerelease = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10093	R	Read Defined Variable [TT] (MPU1)BCU2_ParkBrakeRelease = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10094	R	Read Defined Variable [TT] (MPU1)tbcu3_parkbrakerelease = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10095	R	Read Defined Variable [TT] (MPU1)tbcu4_parkbrakerelease = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10096	R	Read Defined Variable [TT] (MPU1)tbcu1_li_pbrake_stat = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10097	R	Read Defined Variable [TT] (MPU1)tbcu2_li_pbrake_stat = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10098	R	Read Defined Variable [TT] (MPU1)tbcu3_li_pbrake_stat = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10099	R	Read Defined Variable [TT] (MPU1)tbcu4_li_pbrake_stat = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10100	R	Read Defined Variable [TT] (MPU1)BCU2_ParkBrakeIsolDC = 0.0		OK	0	Celiwe Sokhela - 491462	Train

10101	R	Read Defined Variable [TT] (MPU1)TBCU1_parkbrakeisoldc = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10102	R	Read Defined Variable [TT] (MPU1)tbcu2_parkbrakeisoldc = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10103	R	Read Defined Variable [TT] (MPU1)bcu1_parkbrakeisoldc = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10104	R	Read Defined Variable [TT] (MPU1)tbcu3_parkbrakeisoldc = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10105	R	Read Defined Variable [TT] (MPU1)tbcu4_parkbrakeisoldc = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10106	R	Read Defined Variable [TT] (BCU1)LI_PARK_BR_DC = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10107	R	Read Defined Variable [TT] (BCU2)LI_PARK_BR_DC = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10108	R	Read Defined Variable [TT] (TBCU1)LI_PARK_BR_DC = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10109	R	Read Defined Variable [TT] (TBCU2)LI_PARK_BR_DC = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10110	R	Read Defined Variable [TT] (TBCU3)LI_PARK_BR_DC = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10111	R	Read Defined Variable [TT] (TBCU4)LI_PARK_BR_DC = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10112	I	Parking brake manual isolation		OK		Celiwe Sokhela - 491462	Train
10113	I	TC1		OK		Celiwe Sokhela - 491462	Train
10114	A	Put the switch C1.3.2 in ISOLATION position on TC1		OK		Celiwe Sokhela - 491462	Train
10115	R	Read Defined Variable [TT] (BCU1)LI_PARK_BR_RELEASE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10116	R	Read Defined Variable [TT] (MPU1)li_pbk_tc1parkbrakeisol = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10117	R	Read Defined Variable [TT] (MPU1)bcu1_parkbrakeisoldc = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10118	R	Read Defined Variable [TT] (BCU1)LI_PARK_BR_DC = 1.0		OK	1	Celiwe Sokhela - 491462	Train

10119	A	Put the switch C1.3.2 in NORMAL position on TC1		OK		Celiwe Sokhela - 491462	Train
10120	R	Read Defined Variable [TT] (BCU1)LI_PARK_BR_RELEASE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10121	A	Pull the parking brake manual lever of both bogies(a click sound must be heard to indicate parking brake lever is working)		OK		Celiwe Sokhela - 491462	Train
10122	R	Read Defined Variable [TT] (MPU1)li_pbk_tc1parkbrakeisol = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10123	R	Read Defined Variable [TT] (MPU1)bcu1_parkbrakeisoldc = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10124	R	Read Defined Variable [TT] (BCU1)LI_PARK_BR_DC = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10125	I	M4		OK		Celiwe Sokhela - 491462	Train
10126	A	Put the switch C2.3.2 for in ISOLATION position		OK		Celiwe Sokhela - 491462	Train
10127	R	Read Defined Variable [TT] (TBCU4)LI_PARK_BR_RELEASE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10128	R	Read Defined Variable [TT] (MPU1)li_pbk_m4parkbrakeisol = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10129	R	Read Defined Variable [TT] (MPU1)tbcu4_parkbrakeisoldc = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10130	R	Read Defined Variable [TT] (TBCU4)LI_PARK_BR_DC = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10131	A	Put the switch C2.3.2 in NORMAL position on M4		OK		Celiwe Sokhela - 491462	Train
10132	R	Read Defined Variable [TT] (TBCU4)LI_PARK_BR_RELEASE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10133	R	Verify on the DDU that parking brake is still released		OK		Celiwe Sokhela - 491462	Train
10134	A	Pull the parking brake manual lever of both bogies(a click sound must be heard to indicate parking brake lever is working		OK		Celiwe Sokhela - 491462	Train
10135	R	Read Defined Variable [TT] (MPU1)li_pbk_m4parkbrakeisol = 0.0		OK	0	Celiwe Sokhela - 491462	Train

10136	R	Read Defined Variable [TT] (MPU1)tbcu4_parkbrakeisoldc = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10137	R	Read Defined Variable [TT] (TBCU4)LI_PARK_BR_DC = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10138	I	M1		OK		Celiwe Sokhela - 491462	Train
10139	A	Put the switch C2.3.2 for in ISOLATION position		OK		Celiwe Sokhela - 491462	Train
10140	R	Read Defined Variable [TT] (MPU1)li_pbk_m1parkbrakeisol = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10141	R	Read Defined Variable [TT] (MPU1)TBCU1_parkbrakeisoldc = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10142	R	Read Defined Variable [TT] (TBCU1)LI_PARK_BR_DC = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10143	A	Put the switch C2.3.2 in NORMAL position on M1		OK		Celiwe Sokhela - 491462	Train
10144	A	Pull the parking brake manual lever of both bogies(a click sound must be heard to indicate parking brake lever is working		OK		Celiwe Sokhela - 491462	Train
10145	R	Read Defined Variable [TT] (MPU1)li_pbk_m1parkbrakeisol = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10146	R	Read Defined Variable [TT] (MPU1)TBCU1_parkbrakeisoldc = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10147	R	Read Defined Variable [TT] (TBCU1)LI_PARK_BR_DC = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10148	I	M2		OK		Celiwe Sokhela - 491462	Train
10149	A	Put the switch C2.3.2 in ISOLATION position on M2		OK		Celiwe Sokhela - 491462	Train
10150	R	Read Defined Variable [TT] (MPU1)li_pbk_m2parkbrakeisol = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10151	R	Read Defined Variable [TT] (MPU1)tbcu2_parkbrakeisoldc = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10152	R	Read Defined Variable [TT] (TBCU2)LI_PARK_BR_DC = 1.0		OK	1	Celiwe Sokhela - 491462	Train

10153	A	Put the cock C2.3.2 for in NORMAL position on M2		OK		Celiwe Sokhela - 491462	Train
10154	A	Pull the parking brake manual lever of both bogies(a click sound must be heard to indicate parking brake lever is working		OK		Celiwe Sokhela - 491462	Train
10155	R	Read Defined Variable [TT] (MPU1)li_pbk_m2parkbrakeisol = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10156	R	Read Defined Variable [TT] (MPU1)tbcu2_parkbrakeisoldc = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10157	R	Read Defined Variable [TT] (TBCU2)LI_PARK_BR_DC = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10158	I	M3		OK		Celiwe Sokhela - 491462	Train
10159	A	Put the switch C2.3.2 in ISOLATION position on M3		OK		Celiwe Sokhela - 491462	Train
10160	R	Read Defined Variable [TT] (MPU1)li_pbk_m3parkbrakeisol = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10161	R	Read Defined Variable [TT] (MPU1)tbcu3_parkbrakeisoldc = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10162	R	Read Defined Variable [TT] (TBCU3)LI_PARK_BR_DC = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10163	A	Put the cock C2.3.2 for in NORMAL position on M3		OK		Celiwe Sokhela - 491462	Train
10164	A	Pull the parking brake manual lever of both bogies(a click sound must be heard to indicate parking brake lever is working		OK		Celiwe Sokhela - 491462	Train
10165	R	Read Defined Variable [TT] (MPU1)li_pbk_m3parkbrakeisol = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10166	R	Read Defined Variable [TT] (MPU1)tbcu3_parkbrakeisoldc = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10167	I	TC2		OK		Celiwe Sokhela - 491462	Train
10168	A	Put the switch C1.3.2 in ISOLATION position on TC2		OK		Celiwe Sokhela - 491462	Train
10169	R	Read Defined Variable [TT] (TBCU3)LI_PARK_BR_DC = 0.0		OK	0	Celiwe Sokhela - 491462	Train

10170	R	Read Defined Variable [TT] (MPU1)BCU2_ParkBrakeIsolDC = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10171	R	Read Defined Variable [TT] (MPU1)li_pbk_tc2parkbrakeisol = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10172	R	Read Defined Variable [TT] (BCU2)LI_PARK_BR_DC = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10173	A	Put the switch C1.3.2 in NORMAL position on TC2		OK		Celiwe Sokhela - 491462	Train
10174	R	Read Defined Variable [TT] (BCU2)LI_PARK_BR_RELEASE = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10175	A	Pull the parking brake manual lever of both bogies(a click sound must be heard to indicate parking brake lever is working)		OK		Celiwe Sokhela - 491462	Train
10176	R	Read Defined Variable [TT] (MPU1)BCU2_ParkBrakeIsolDC = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10177	R	Read Defined Variable [TT] (MPU1)li_pbk_tc2parkbrakeisol = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10178	I	Remote parking brake application TC2		OK		Celiwe Sokhela - 491462	Train
10179	R	Read Defined Variable [TT] (BCU2)LI_PARK_BR_DC = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10180	A	Switch active cab to TC2		OK		Celiwe Sokhela - 491462	Train
10181	A	Turn the switch 45S1 to apply parking brake		OK		Celiwe Sokhela - 491462	Train
10182	R	Lamp 45H2 is ON on the alarm module		OK		Celiwe Sokhela - 491462	Train
10183	R	Measure the pressure of the test point C1.11 on TC1, test point must be set to 4.8 bar Read Undefined Value : x (Bar)		OK	1.744	Celiwe Sokhela - 491462	Train
10184	R	Measure the pressure of the test point C2.11 on M4, test point must be set to 4.8 bar Read Undefined Value : x (Bar)		OK	1.987	Celiwe Sokhela - 491462	Train
10185	R	Measure the pressure of the test point C2.11 on M1, test point must be set to 4.8 bar Read Undefined Value : x (Bar)		OK	2.083	Celiwe Sokhela - 491462	Train
10186	R	Measure the pressure of the test point C2.11 on M2, test point must be set to 4.8 bar Read Undefined Value : x (Bar)		OK	1.945	Celiwe Sokhela - 491462	Train

10187	R	Measure the pressure of the test point C2.11 on M3, test point must be set to 4.8 bar Read Undefined Value : x (Bar)		OK	1.921	Celiwe Sokhela - 491462	Train
10188	R	Measure the pressure of the test point C1.11 on TC2, test point must be set to 4.8 bar Read Undefined Value : x (Bar)		OK	1.838	Celiwe Sokhela - 491462	Train
10189	R	Read Defined Variable [TT] (MPU1)tbcu2_parkbrakerelease = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10190	R	Read Defined Variable [TT] (MPU1)TBCU1_parkbrakerelease = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10191	R	Read Defined Variable [TT] (MPU1)bcu1_parkbrakerelease = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10192	R	Read Defined Variable [TT] (MPU1)BCU2_ParkBrakeRelease = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10193	R	Read Defined Variable [TT] (MPU1)tbcu3_parkbrakerelease = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10194	R	Read Defined Variable [TT] (MPU1)tbcu4_parkbrakerelease = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10195	R	Read Defined Variable [TT] (MPU1)tbcu1_li_pbrake_stat = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10196	R	Read Defined Variable [TT] (MPU1)tbcu2_li_pbrake_stat = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10197	R	Read Defined Variable [TT] (MPU1)tbcu3_li_pbrake_stat = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10198	R	Read Defined Variable [TT] (MPU1)tbcu4_li_pbrake_stat = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10199	R	Read Defined Variable [TT] (MPU1)BCU2_ParkBrakeIsolDC = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10200	R	Read Defined Variable [TT] (MPU1)TBCU1_parkbrakeisoldc = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10201	R	Read Defined Variable [TT] (MPU1)tbcu2_parkbrakeisoldc = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10202	R	Read Defined Variable [TT] (MPU1)bcu1_parkbrakeisoldc = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10203	R	Read Defined Variable [TT] (MPU1)tbcu3_parkbrakeisoldc = 0.0		OK	0	Celiwe Sokhela - 491462	Train

10204	R	Read Defined Variable [TT] (MPU1)tbcu4_parkbrakeisoldc = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10205	A	Turn the switch 45S1 to release parking brake		OK		Celiwe Sokhela - 491462	Train
10206	R	Lamp 45H2 is OFF on the alarm module		OK		Celiwe Sokhela - 491462	Train
10207	I	Parking brake is released in all cars		OK		Celiwe Sokhela - 491462	Train
10208	R	On the Driver's event list, there is no message reporting parking brake release failure		OK		Celiwe Sokhela - 491462	Train
10209	R	Read Defined Variable [TT] (MPU1)tbcu2_parkbrakerelease = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10210	R	Read Defined Variable [TT] (MPU1)TBCU1_parkbrakerelease = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10211	R	Read Defined Variable [TT] (MPU1)bcu1_parkbrakerelease = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10212	R	Read Defined Variable [TT] (MPU1)BCU2_ParkBrakeRelease = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10213	R	Read Defined Variable [TT] (MPU1)tbcu3_parkbrakerelease = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10214	R	Read Defined Variable [TT] (MPU1)tbcu4_parkbrakerelease = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10215	R	Read Defined Variable [TT] (MPU1)tbcu1_li_pbrake_stat = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10216	R	Read Defined Variable [TT] (MPU1)tbcu2_li_pbrake_stat = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10217	R	Read Defined Variable [TT] (MPU1)tbcu3_li_pbrake_stat = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10218	R	Read Defined Variable [TT] (MPU1)tbcu4_li_pbrake_stat = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10219	R	Read Defined Variable [TT] (MPU1)BCU2_ParkBrakeIsolDC = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10220	R	Read Defined Variable [TT] (MPU1)TBCU1_parkbrakeisoldc = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10221	R	Read Defined Variable [TT] (MPU1)tbcu2_parkbrakeisoldc = 0.0		OK	0	Celiwe Sokhela - 491462	Train

10222	R	Read Defined Variable [TT] (MPU1)bcu1_parkbrakeisoldc = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10223	R	Read Defined Variable [TT] (MPU1)tbcu3_parkbrakeisoldc = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10224	R	Read Defined Variable [TT] (MPU1)tbcu4_parkbrakeisoldc = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10225	I	End of Test		OK		Celiwe Sokhela - 491462	Train

Section 15 – Service Brake

15.3 Instructions list

15.3.2 040_SUP-Car Suspension

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	Car suspension Test		OK		Sqiniseko Xulu - 493646	Train
10002	I	Initial Conditions		OK		Sqiniseko Xulu - 493646	Train
10003	I	Car suspension is not isolated in all cars		OK		Sqiniseko Xulu - 493646	Train
10004	I	Air in main pipe is 10 bar		OK		Sqiniseko Xulu - 493646	Train
10005	I	TC1		OK		Sqiniseko Xulu - 493646	Train
10006	R	Check the pressure on test point LPTP. Read Undefined Value : x ()		OK	307	Sqiniseko Xulu - 493646	Train
10007	R	Read Min/Max [TT] (MPU1)bcu1_bcususppress : 311<= x <= 371		OK	311	Tshembhani Khosa - 446920	Train
10008	R	Read Defined Variable [TT] (MPU1)bcu1_suspisodc = 0.0		OK	0	Sqiniseko Xulu - 493646	Train
10009	A	Close the isolation cock C1.10		OK		Tshembhani Khosa - 446920	Train
10010	R	Read Defined Variable [TT] (MPU1)bcu1_suspisodc = 1.0		OK	1	Sqiniseko Xulu - 493646	Train
10011	R	Check Pressure on test point C1.11.2 = 0bar Read Undefined Value : x ()		OK	0	Sqiniseko Xulu - 493646	Train
10012	A	Open the isolation cock C1.10		OK		Sqiniseko Xulu - 493646	Train
10013	A	Check all test point covers have been put back in place in the brake panel and suspension.		OK		Sqiniseko Xulu - 493646	Train
10014	I	M4		OK		Sqiniseko Xulu - 493646	Train
10015	R	Check the pressure on test point LPTP. Read Undefined Value : x ()		OK	271.1	Sqiniseko Xulu - 493646	Train
10016	R	Read Min/Max [TT] (MPU1)tbcu4_bcususppress : 260<= x <= 320		OK	272.4	Sqiniseko Xulu - 493646	Train
10017	R	Read Defined Variable [TT] (MPU1)tbcu4_suspisodc = 0.0		OK	0	Sqiniseko Xulu - 493646	Train

10018	A	Close the isolation cock C2.10		OK		Sqiniseko Xulu - 493646	Train
10019	R	Check Pressure on test point C2.11.2 = 0bar Read Undefined Value : x ()		OK	0	Sqiniseko Xulu - 493646	Train
10020	R	Read Defined Variable [TT] (MPU1)tbcu4_suspisodc = 1.0		OK	1	Sqiniseko Xulu - 493646	Train
10021	A	Open the isolation cock C2.10		OK		Sqiniseko Xulu - 493646	Train
10022	A	Check all test point covers have been put back in place in the brake panel and suspension.		OK		Sqiniseko Xulu - 493646	Train
10023	I	M1		OK		Sqiniseko Xulu - 493646	Train
10024	R	Check the pressure on test point LPTP. Read Undefined Value : x ()		OK	273.6	Sqiniseko Xulu - 493646	Train
10025	R	Read Min/Max [TT] (MPU1)TBCU1_bcususppress : 271<= x <= 331		OK	274.28	Sqiniseko Xulu - 493646	Train
10026	R	Read Defined Variable [TT] (MPU1)TBCU1_suspisodc = 0.0		OK	0	Sqiniseko Xulu - 493646	Train
10027	A	Close the isolation cock C2.10		OK		Sqiniseko Xulu - 493646	Train
10028	R	Check Pressure on test point C2.11.2 = 0bar Read Undefined Value : x ()		OK	0	Sqiniseko Xulu - 493646	Train
10029	R	Read Defined Variable [TT] (MPU1)TBCU1_suspisodc = 1.0		OK	1	Sqiniseko Xulu - 493646	Train
10030	A	Open the isolation cock C2.10		OK		Sqiniseko Xulu - 493646	Train
10031	A	Check all test point covers have been put back in place in the brake panel and suspension.		OK		Sqiniseko Xulu - 493646	Train
10032	I	M2		OK		Sqiniseko Xulu - 493646	Train
10033	R	Check the pressure on test point LPTP. Read Undefined Value : x ()		OK	278.6	Sqiniseko Xulu - 493646	Train
10034	R	Read Min/Max [TT] (MPU1)tbcu2_bcususppress : 271<= x <= 331		OK	279.32	Sqiniseko Xulu - 493646	Train
10035	R	Read Defined Variable [TT] (MPU1)tbcu2_suspisodc = 0.0		OK	0	Sqiniseko Xulu - 493646	Train
10036	A	Close the isolation cock C2.10		OK		Sqiniseko Xulu - 493646	Train

10037	R	Check Pressure on test point C2.11.2 = 0bar Read Undefined Value : x ()		OK	0	Sqiniseko Xulu - 493646	Train
10038	R	Read Defined Variable [TT] (MPU1)tbcu2_suspisodc = 1.0		OK	1	Sqiniseko Xulu - 493646	Train
10039	A	Open the isolation cock C2.10		OK		Sqiniseko Xulu - 493646	Train
10040	A	Check all test point covers have been put back in place in the brake panel and suspension.		OK		Sqiniseko Xulu - 493646	Train
10041	I	M3		OK		Sqiniseko Xulu - 493646	Train
10042	A	Check the pressure on test point LPTP.		OK		Sqiniseko Xulu - 493646	Train
10043	R	LPTP		OK	279.6	Sqiniseko Xulu - 493646	Train
10044	R	Read Min/Max [TT] (MPU1)tbcu3_bcususppress : 260<= x <= 320		OK	281.29	Sqiniseko Xulu - 493646	Train
10045	R	Read Defined Variable [TT] (MPU1)tbcu3_suspisodc = 0.0		OK	0	Sqiniseko Xulu - 493646	Train
10046	A	Close the isolation cock C2.10		OK		Sqiniseko Xulu - 493646	Train
10047	R	Check Pressure on test point C2.11.2 = 0bar Read Undefined Value : x ()		OK	0	Sqiniseko Xulu - 493646	Train
10048	R	Read Defined Variable [TT] (MPU1)tbcu3_suspisodc = 1.0		OK	1	Sqiniseko Xulu - 493646	Train
10049	A	Open the isolation cock C2.10		OK		Sqiniseko Xulu - 493646	Train
10050	A	Check all test point covers have been put back in place in the brake panel and suspension.		OK		Sqiniseko Xulu - 493646	Train
10051	I	TC2		OK		Sqiniseko Xulu - 493646	Train
10052	R	Check the pressure on test point LPTP. Read Undefined Value : x ()		OK	3.33	Sqiniseko Xulu - 493646	Train
10053	R	Read Min/Max [TT] (MPU1)BCU2_BcuSuspPress : 311<= x <= 371		OK	337.09	Sqiniseko Xulu - 493646	Train
10054	R	Read Defined Variable [TT] (MPU1)BCU2_SuspIsoDC = 0.0		OK	0	Sqiniseko Xulu - 493646	Train

10055	A	Close the isolation cock C1.10		OK		Sqiniseko Xulu - 493646	Train
10056	R	Read Defined Variable [TT] (MPU1)BCU2_SuspIsoDC = 1.0		OK	1	Sqiniseko Xulu - 493646	Train
10057	R	Check Pressure on test point C1.11.2 = 0bar Read Undefined Value : x ()		OK	0	Sqiniseko Xulu - 493646	Train
10058	A	Open the isolation cock C1.10		OK		Sqiniseko Xulu - 493646	Train
10059	A	Check all test point covers have been put back in place in the brake panel and suspension.		OK		Sqiniseko Xulu - 493646	Train
10060	I	End of Test		OK		Sqiniseko Xulu - 493646	Train

15.3.1 040_SBK-Service Brake

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	Service Brake SPP=040 SBK		OK		Alleta Sekgololo - 417407	Train
10002	I	Initial Conditions		OK		Alleta Sekgololo - 417407	Train
10003	I	Emergency brake button 44S1 is released in both TC1 and TC2		OK		Alleta Sekgololo - 417407	Train
10004	I	Pressure on the main pipe should be higher than 7 bar		OK		Alleta Sekgololo - 417407	Train
10005	I	The ERTMS switch 62S1 is in ISOLATION position in both TC1 and TC2		OK		Alleta Sekgololo - 417407	Train
10006	I	The Deadman switch 60S1 is in OVERRIDE position in both TC1 and TC2		OK		Alleta Sekgololo - 417407	Train
10007	I	Driving mode should be selected as COUPLE/WASH in both TC1 and TC2		OK		Alleta Sekgololo - 417407	Train
10008	I	Train has sufficient scotch blocks to prevent it from moving		OK		Alleta Sekgololo - 417407	Train
10009	I	Ensure that the propulsion system is inhibited to prevent movement when the master controller is in TRACTION position		OK		Alleta Sekgololo - 417407	Train
10010	I	Start of Test		OK		Alleta Sekgololo - 417407	Train
10011	I	Brake application / release		OK		Alleta Sekgololo - 417407	Train
10012	A	Activate the cab on TC1		OK		Alleta Sekgololo - 417407	Train
10013	I	To begin test, the EPC life signal must be live		OK		Alleta Sekgololo - 417407	Train
10014	R	Read Defined Variable [TT] (BCU1)LI_REGULATOR_STAT = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10015	R	Read Defined Variable [TT] (BCU2)LI_REGULATOR_STAT = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10016	R	Read Defined Variable [TT] (TBCU1)LI_REGULATOR_STAT = 1.0		OK	1	Alleta Sekgololo - 417407	Train

10017	R	Read Defined Variable [TT] (TBCU2)LI_REGULATOR_STAT = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10018	R	Read Defined Variable [TT] (TBCU3)LI_REGULATOR_STAT = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10019	R	Read Defined Variable [TT] (TBCU4)LI_REGULATOR_STAT = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10020	A	Put the direction selector switch in FORWARD position		OK		Alleta Sekgololo - 417407	Train
10021	R	Emergency brake is released		OK		Alleta Sekgololo - 417407	Train
10022	R	LED 40H1 is OFF on the alarm module		OK		Alleta Sekgololo - 417407	Train
10023	A	Move slowly the master controller from OFF position to maximum brake position and check the following items - Variables on brake software as demanded below.		OK		Alleta Sekgololo - 417407	Train
10024	I	The pressure measured below can have the values changed after the brake adjustment during performance test. The brake pressure should increase with respect to the master controller position and there should be no sudden jumps in the pressure when observing the PWM signal on the DDU maintenance screen		OK		Alleta Sekgololo - 417407	Train
10025	I	All the brake discs apply pressure on the wheels, it is necessary to go bogie by bogie to physically check if the brake pads are in contact with the wheel		OK		Alleta Sekgololo - 417407	Train
10026	R	SBTP TC1 Result Min/Max : 1.27<= x <= 1.67 (Bar)		OK	1.36	Alleta Sekgololo - 417407	Train
10027	R	Brake discs apply pressure on car TC1		OK		Alleta Sekgololo - 417407	Train
10028	R	SBTP M4 Result Min/Max : 1.29<= x <= 1.69 (Bar)		OK	1.42	Alleta Sekgololo - 417407	Train
10029	R	Brake discs apply pressure on car M4		OK		Alleta Sekgololo - 417407	Train
10030	R	SBTP M1 Result Min/Max : 1.29<= x <= 1.69 (Bar)		OK	1.59	Alleta Sekgololo - 417407	Train
10031	R	Brake discs apply pressure on car M1		OK		Alleta Sekgololo - 417407	Train
10032	R	SBTP M2 Result Min/Max : 1.29<= x <= 1.69 (Bar)		OK	1.31	Alleta Sekgololo - 417407	Train

10033	R	Brake discs apply pressure on car M2		OK		Alleta Sekgololo - 417407	Train
10034	R	SBTP M3 Result Min/Max : 1.29<= x <= 1.69 (Bar)		OK	1.39	Alleta Sekgololo - 417407	Train
10035	R	Brake discs apply pressure on car M3		OK		Alleta Sekgololo - 417407	Train
10036	R	SBTP TC2 Result Min/Max : 1.27<= x <= 1.67 (Bar)		OK	1.277	Alleta Sekgololo - 417407	Train
10037	R	Brake discs apply pressure on car TC2		OK		Alleta Sekgololo - 417407	Train
10038	I	The pressure measured below should be approximately equal to what is observed on the PWM signa on the DDU maintenance screen		OK		Alleta Sekgololo - 417407	Train
10039	R	Read Min/Max [TT] (MPU1)bcu1_bcubpipepress : 127<= x <= 167		OK	149	Alleta Sekgololo - 417407	Train
10040	R	Read Min/Max [TT] (MPU1)BCU2_BcuBPipePress : 127<= x <= 167		OK	150	Alleta Sekgololo - 417407	Train
10041	R	Read Min/Max [TT] (MPU1)TBCU1_bcubpipepress : 129<= x <= 169		OK	148	Alleta Sekgololo - 417407	Train
10042	R	Read Min/Max [TT] (MPU1)tbcu2_bcubpipepress : 129<= x <= 169		OK	143	Alleta Sekgololo - 417407	Train
10043	R	Read Min/Max [TT] (MPU1)tbcu3_bcubpipepress : 129<= x <= 169		OK	138	Alleta Sekgololo - 417407	Train
10044	R	Read Min/Max [TT] (MPU1)tbcu4_bcubpipepress : 129<= x <= 169		OK	143	Alleta Sekgololo - 417407	Train
10045	R	Read Defined Variable [TT] (MPU1)TBCU1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10046	R	Read Defined Variable [TT] (MPU1)tbcu2_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10047	R	Read Defined Variable [TT] (MPU1)tbcu3_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10048	R	Read Defined Variable [TT] (MPU1)tbcu4_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train

10049	R	Read Defined Variable [TT] (MPU1)BCU2_BrakeNotApp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10050	R	Read Defined Variable [TT] (MPU1)bcu1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10051	R	Read Defined Variable [TT] (BCU1)LI_BRAKE_NOT_APPLED = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10052	R	Read Defined Variable [TT] (BCU2)LI_BRAKE_NOT_APPLED = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10053	R	Check the pressure on the brake pressure gauge on TC1 Read Undefined Value : x ()		OK	9.8	Alleta Sekgololo - 417407	Train
10054	R	Check the pressure on the brake pressure gauge on TC2 Read Undefined Value : x ()		OK	9.6	Alleta Sekgololo - 417407	Train
10055	I	The pressure showed on pressure gauge (driver desk) is the same as the measured on the test point BCTP of the car TC.		OK		Alleta Sekgololo - 417407	Train
10056	A	Move slowly the master controller from 100% BRAKE position to OFF position. Observe the PWM behaviour of the brake cylinder pressure. it may be necessary to repeat the test until you are satisfied		OK		Alleta Sekgololo - 417407	Train
10057	I	There must not have sudden release of pressure while the master controller is slowly moved to OFF position.		OK		Alleta Sekgololo - 417407	Train
10058	R	Pressure on BCTP (Car TC) = 0bar (+/- 0,2bar) Read Undefined Value : x ()		OK	0	Alleta Sekgololo - 417407	Train
10059	R	Pressure on SBTP (all M cars) = 0bar (+/- 0,2bar) Read Undefined Value : x ()		OK	0	Alleta Sekgololo - 417407	Train
10060	R	Pressure on BCTP (all M cars) = 0bar (+/- 0,2bar) Read Undefined Value : x ()		OK	0	Alleta Sekgololo - 417407	Train
10061	R	Pressure on SBTP all TC cars) = 0bar (+/- 0,2bar) Read Undefined Value : x ()		OK	0	Alleta Sekgololo - 417407	Train
10062	I	It is necessary to go bogie by bogie to verify that brake pads are not in contact with the wheels		OK		Alleta Sekgololo - 417407	Train
10063	R	Brake discs do not apply pressure on car TC1		OK		Alleta Sekgololo - 417407	Train

10064	R	Brake discs do not apply pressure on car M4		OK		Alleta Sekgololo - 417407	Train
10065	R	Brake discs do not apply pressure on car M1		OK		Alleta Sekgololo - 417407	Train
10066	R	Brake discs do not apply pressure on car M2		OK		Alleta Sekgololo - 417407	Train
10067	R	Brake discs do not apply pressure on car M3		OK		Alleta Sekgololo - 417407	Train
10068	R	Brake discs do not apply pressure on car TC2		OK		Alleta Sekgololo - 417407	Train
10069	I	Holding Brake		OK		Alleta Sekgololo - 417407	Train
10070	A	Put the master controller on 100% BRAKE position		OK		Alleta Sekgololo - 417407	Train
10071	R	Read Defined Variable [TT] (MPU1)TBCU1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10072	R	Read Defined Variable [TT] (MPU1)tbcu2_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10073	R	Read Defined Variable [TT] (MPU1)tbcu3_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10074	R	Read Defined Variable [TT] (MPU1)tbcu4_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10075	R	Read Defined Variable [TT] (MPU1)BCU2_BrakeNotApp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10076	R	Read Defined Variable [TT] (MPU1)bcu1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10077	R	Read Defined Variable [TT] (MPU1)bcu1_holdbrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10078	R	Read Defined Variable [TT] (MPU1)BCU2_HoldBrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10079	R	Read Defined Variable [TT] (MPU1)TBCU1_holdbrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10080	R	Read Defined Variable [TT] (MPU1)tbcu2_holdbrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train

10081	R	Read Defined Variable [TT] (MPU1)tbcu3_holdbrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10082	R	Read Defined Variable [TT] (MPU1)tbcu4_holdbrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10083	A	Put the master controller on OFF position		OK		Alleta Sekgololo - 417407	Train
10084	R	Read Defined Variable [TT] (MPU1)TBCU1_brakenotapp = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10085	R	Read Defined Variable [TT] (MPU1)tbcu2_brakenotapp = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10086	R	Read Defined Variable [TT] (MPU1)tbcu3_brakenotapp = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10087	R	Read Defined Variable [TT] (MPU1)tbcu4_brakenotapp = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10088	R	Read Defined Variable [TT] (MPU1)BCU2_BrakeNotApp = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10089	R	Read Defined Variable [TT] (MPU1)bcu1_brakenotapp = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10090	R	Read Defined Variable [TT] (MPU1)bcu1_holdbrake = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10091	R	Read Defined Variable [TT] (MPU1)BCU2_HoldBrake = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10092	R	Read Defined Variable [TT] (MPU1)TBCU1_holdbrake = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10093	R	Read Defined Variable [TT] (MPU1)tbcu2_holdbrake = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10094	R	Read Defined Variable [TT] (MPU1)tbcu3_holdbrake = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10095	R	Read Defined Variable [TT] (MPU1)tbcu4_holdbrake = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10096	A	Put the driving mode switch 30S1 to EFFORT position		OK		Alleta Sekgololo - 417407	Train
10097	A	Put the master controller on 100% BRAKE position		OK		Alleta Sekgololo - 417407	Train
10098	R	Read Defined Variable [TT] (MPU1)TBCU1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train

10099	R	Read Defined Variable [TT] (MPU1)tbcu2_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10100	R	Read Defined Variable [TT] (MPU1)tbcu3_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10101	R	Read Defined Variable [TT] (MPU1)tbcu4_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10102	R	Read Defined Variable [TT] (MPU1)BCU2_BrakeNotApp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10103	R	Read Defined Variable [TT] (MPU1)bcu1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10104	R	Read Defined Variable [TT] (MPU1)bcu1_holdbrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10105	R	Read Defined Variable [TT] (MPU1)BCU2_HoldBrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10106	R	Read Defined Variable [TT] (MPU1)TBCU1_holdbrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10107	R	Read Defined Variable [TT] (MPU1)tbcu2_holdbrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10108	R	Read Defined Variable [TT] (MPU1)tbcu3_holdbrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10109	R	Read Defined Variable [TT] (MPU1)tbcu4_holdbrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10110	A	Position the master controller on OFF position		OK		Alleta Sekgololo - 417407	Train
10111	R	Read Defined Variable [TT] (MPU1)TBCU1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10112	R	Read Defined Variable [TT] (MPU1)tbcu2_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10113	R	Read Defined Variable [TT] (MPU1)tbcu3_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10114	R	Read Defined Variable [TT] (MPU1)tbcu4_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10115	R	Read Defined Variable [TT] (MPU1)BCU2_BrakeNotApp = 0.0		OK	0	Alleta Sekgololo - 417407	Train

10116	R	Read Defined Variable [TT] (MPU1)bcu1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10117	R	Read Defined Variable [TT] (MPU1)bcu1_holdbrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10118	R	Read Defined Variable [TT] (MPU1)BCU2_HoldBrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10119	R	Read Defined Variable [TT] (MPU1)TBCU1_holdbrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10120	R	Read Defined Variable [TT] (MPU1)tbcu2_holdbrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10121	R	Read Defined Variable [TT] (MPU1)tbcu3_holdbrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10122	R	Read Defined Variable [TT] (MPU1)tbcu4_holdbrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10123	A	Position the driving mode switch 30S1 to DEPOT position		OK		Alleta Sekgololo - 417407	Train
10124	A	Position the master controller on 100% BRAKE position		OK		Alleta Sekgololo - 417407	Train
10125	R	Read Defined Variable [TT] (MPU1)TBCU1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10126	R	Read Defined Variable [TT] (MPU1)tbcu2_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10127	R	Read Defined Variable [TT] (MPU1)tbcu3_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10128	R	Read Defined Variable [TT] (MPU1)tbcu4_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10129	R	Read Defined Variable [TT] (MPU1)BCU2_BrakeNotApp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10130	R	Read Defined Variable [TT] (MPU1)bcu1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10131	R	Read Defined Variable [TT] (MPU1)bcu1_holdbrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10132	R	Read Defined Variable [TT] (MPU1)BCU2_HoldBrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train

10133	R	Read Defined Variable [TT] (MPU1)TBCU1_holdbrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10134	R	Read Defined Variable [TT] (MPU1)tbcu2_holdbrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10135	R	Read Defined Variable [TT] (MPU1)tbcu3_holdbrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10136	R	Read Defined Variable [TT] (MPU1)tbcu4_holdbrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10137	A	Position the master controller on OFF position		OK		Alleta Sekgololo - 417407	Train
10138	R	Read Defined Variable [TT] (MPU1)BCU2_BrakeNotApp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10139	R	Read Defined Variable [TT] (MPU1)bcu1_holdbrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10140	R	Read Defined Variable [TT] (MPU1)BCU2_HoldBrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10141	R	Read Defined Variable [TT] (MPU1)TBCU1_holdbrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10142	R	Read Defined Variable [TT] (BCU2)LI_BRAKE_NOT_APPLED = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10143	R	Read Defined Variable [TT] (TBCU1)LI_BRAKE_NOT_APPLED = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10144	R	Read Defined Variable [TT] (MPU1)tbcu2_holdbrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10145	R	Read Defined Variable [TT] (TBCU2)LI_BRAKE_NOT_APPLED = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10146	R	Read Defined Variable [TT] (TBCU3)LI_BRAKE_NOT_APPLED = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10147	R	Read Defined Variable [TT] (TBCU4)LI_BRAKE_NOT_APPLED = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10148	R	Read Defined Variable [TT] (MPU1)tbcu3_holdbrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10149	R	Read Defined Variable [TT] (MPU1)tbcu4_holdbrake = 1.0		OK	1	Alleta Sekgololo - 417407	Train

10150	A	Return the driving mode switch 30S1 to COUPLE / WASH position		OK		Alleta Sekgololo - 417407	Train
10151	A	Position the master controller in 100% BRAKE position		OK		Alleta Sekgololo - 417407	Train
10152	I	Brake isolation through the isolation cock		OK		Alleta Sekgololo - 417407	Train
10153	I	TC1 service brake manual isolation		OK		Alleta Sekgololo - 417407	Train
10154	A	Close the isolation cock C1.3.1		OK		Alleta Sekgololo - 417407	Train
10155	R	Lamp 40H2 is ON on the alarm mode for EB reduced		OK		Alleta Sekgololo - 417407	Train
10156	R	Read Defined Variable [TT] (BCU1)LI_BRAKE_NOT_APPLED = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10157	A	Put the manometer test point to BCTP		OK		Alleta Sekgololo - 417407	Train
10158	R	Pressure on BCTP decreases slowly until it reaches +/- 0.2 bar		OK		Alleta Sekgololo - 417407	Train
10159	R	Brake discs are not in contact with wheels on TC1 bogies		OK		Alleta Sekgololo - 417407	Train
10160	R	Read Defined Variable [TT] (MPU1)bcu1_servbrakeisoldc = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10161	R	Read Defined Variable [TT] (MPU1)BCU2_ServBrakeIsolDC = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10162	R	Read Defined Variable [TT] (MPU1)TBCU1_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10163	R	Read Defined Variable [TT] (BCU2)LI_BRAKE_NOT_APPLED = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10164	R	Read Defined Variable [TT] (TBCU1)LI_BRAKE_NOT_APPLED = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10165	R	Read Defined Variable [TT] (BCU1)LI_BRAKE_NOT_APPLED = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10166	R	Read Defined Variable [TT] (TBCU2)LI_BRAKE_NOT_APPLED = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10167	R	Read Defined Variable [TT] (TBCU3)LI_BRAKE_NOT_APPLED = 0.0		OK	0	Alleta Sekgololo - 417407	Train

10168	R	Read Defined Variable [TT] (TBCU4)LI_BRAKE_NOT_APPLED = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10169	R	Read Defined Variable [TT] (MPU1)tbcu2_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10170	R	Read Defined Variable [TT] (MPU1)tbcu3_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10171	R	Read Defined Variable [TT] (MPU1)tbcu4_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10172	R	Read Defined Variable [TT] (MPU1)li_sbk_tc1servicebrakedc = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10173	R	Read Defined Variable [TT] (MPU1)li_sbk_m1servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10174	R	Read Defined Variable [TT] (MPU1)li_sbk_m2servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10175	R	Read Defined Variable [TT] (MPU1)li_sbk_m3servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10176	R	Read Defined Variable [TT] (MPU1)li_sbk_m4servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10177	R	Read Defined Variable [TT] (MPU1)li_sbk_tc2servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10178	R	Read Defined Variable [TT] (MPU1)TBCU1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10179	R	Read Defined Variable [TT] (MPU1)tbcu2_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10180	R	Read Defined Variable [TT] (MPU1)tbcu3_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10181	R	Read Defined Variable [TT] (MPU1)tbcu4_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10182	R	Read Defined Variable [TT] (MPU1)BCU2_BrakeNotApp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10183	R	Read Defined Variable [TT] (MPU1)bcu1_brakenotapp = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10184	A	Open the isolation cock C1.3.1		OK		Alleta Sekgololo - 417407	Train
10185	R	Lamp 40H2 is OFF on the alarm mode for EB reduced		OK		Alleta Sekgololo - 417407	Train

10186	R	Read Defined Variable [TT] (BCU1)LI_BRAKE_NOT_APPLED = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10187	R	Pressure measured on test point BCTP increases slowly (brake reservoir) until service brake pressure in TC1 until it reaches 1,47bar (+/-0,2bar)		OK		Alleta Sekgololo - 417407	Train
10188	R	Brake discs are in contact with wheels on TC1 bogies		OK		Alleta Sekgololo - 417407	Train
10189	R	Read Defined Variable [TT] (MPU1)bcu1_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10190	R	Read Defined Variable [TT] (MPU1)BCU2_ServBrakeIsolDC = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10191	R	Read Defined Variable [TT] (MPU1)TBCU1_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10192	R	Read Defined Variable [TT] (MPU1)tbcu2_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10193	R	Read Defined Variable [TT] (MPU1)tbcu3_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10194	R	Read Defined Variable [TT] (MPU1)tbcu4_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10195	R	Read Defined Variable [TT] (MPU1)li_sbk_tc1servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10196	R	Read Defined Variable [TT] (MPU1)li_sbk_m1servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10197	R	Read Defined Variable [TT] (MPU1)li_sbk_m2servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10198	R	Read Defined Variable [TT] (MPU1)li_sbk_m3servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10199	R	Read Defined Variable [TT] (MPU1)li_sbk_m4servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10200	R	Read Defined Variable [TT] (MPU1)li_sbk_tc2servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10201	R	Read Defined Variable [TT] (MPU1)TBCU1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10202	R	Read Defined Variable [TT] (MPU1)tbcu2_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train

10203	R	Read Defined Variable [TT] (MPU1)tbcu3_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10204	R	Read Defined Variable [TT] (MPU1)tbcu4_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10205	R	Read Defined Variable [TT] (MPU1)BCU2_BrakeNotApp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10206	R	Read Defined Variable [TT] (MPU1)bcu1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10207	A	Remove manometer on TC1 BCTP point		OK		Alleta Sekgololo - 417407	Train
10208	I	M4 service brake manual isolation		OK		Alleta Sekgololo - 417407	Train
10209	A	Close the isolation cock C2.3.1		OK		Alleta Sekgololo - 417407	Train
10210	R	Message on DDU warning the maintenance/driver for repair at the end of the day. IOS 886: "Mechanical Brake manually isolated on M4"		OK		Alleta Sekgololo - 417407	Train
10211	R	Lamp 40H2 is "ON" on the alarm mode for EB reduced		OK		Alleta Sekgololo - 417407	Train
10212	A	Put manometer on M4 BCTP point		OK		Alleta Sekgololo - 417407	Train
10213	R	Pressure measured on test point BCTP decreases slowly until 0 bar (+/-0,2bar)		OK	0	Alleta Sekgololo - 417407	Train
10214	R	Brake discs are not in contact with wheels on M4 bogies		OK		Alleta Sekgololo - 417407	Train
10215	R	Read Defined Variable [TT] (MPU1)bcu1_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10216	R	Read Defined Variable [TT] (MPU1)BCU2_ServBrakeIsolDC = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10217	R	Read Defined Variable [TT] (MPU1)TBCU1_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10218	R	Read Defined Variable [TT] (MPU1)tbcu2_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10219	R	Read Defined Variable [TT] (MPU1)tbcu3_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10220	R	Read Defined Variable [TT] (MPU1)tbcu4_servbrakeisoldc = 1.0		OK	1	Alleta Sekgololo - 417407	Train

10221	R	Read Defined Variable [TT] (MPU1)li_sbk_tc1servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10222	R	Read Defined Variable [TT] (MPU1)li_sbk_m1servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10223	R	Read Defined Variable [TT] (MPU1)li_sbk_m2servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10224	R	Read Defined Variable [TT] (MPU1)li_sbk_m3servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10225	R	Read Defined Variable [TT] (MPU1)li_sbk_m4servicebrakedc = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10226	R	Read Defined Variable [TT] (MPU1)li_sbk_tc2servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10227	R	Read Defined Variable [TT] (MPU1)TBCU1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10228	R	Read Defined Variable [TT] (MPU1)tbcu2_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10229	R	Read Defined Variable [TT] (MPU1)tbcu3_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10230	R	Read Defined Variable [TT] (MPU1)tbcu4_brakenotapp = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10231	R	Read Defined Variable [TT] (MPU1)BCU2_BrakeNotApp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10232	R	Read Defined Variable [TT] (MPU1)bcu1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10233	A	Open the isolation cock C2.3.1		OK		Alleta Sekgololo - 417407	Train
10234	R	Lamp 40H2 is OFF for EB reduced on the alarm module		OK		Alleta Sekgololo - 417407	Train
10235	R	Pressure measured on test point BCTP increases slowly (brake reservoir) until service brake pressure in M4 car reaches 1,49bar (+/-0,2bar)		OK		Alleta Sekgololo - 417407	Train
10236	R	Brake discs are in contact with wheels on M4 bogies		OK		Alleta Sekgololo - 417407	Train
10237	R	Read Defined Variable [TT] (MPU1)bcu1_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train

10238	R	Read Defined Variable [TT] (MPU1)BCU2_ServBrakeIsolDC = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10239	R	Read Defined Variable [TT] (MPU1)TBCU1_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10240	R	Read Defined Variable [TT] (MPU1)tbcu2_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10241	R	Read Defined Variable [TT] (MPU1)tbcu3_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10242	R	Read Defined Variable [TT] (MPU1)tbcu4_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10243	R	Read Defined Variable [TT] (MPU1)li_sbk_tc1servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10244	R	Read Defined Variable [TT] (MPU1)li_sbk_m1servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10245	R	Read Defined Variable [TT] (MPU1)li_sbk_m2servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10246	R	Read Defined Variable [TT] (MPU1)li_sbk_m3servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10247	R	Read Defined Variable [TT] (MPU1)li_sbk_m4servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10248	R	Read Defined Variable [TT] (MPU1)li_sbk_tc2servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10249	R	Read Defined Variable [TT] (MPU1)TBCU1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10250	R	Read Defined Variable [TT] (MPU1)tbcu2_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10251	R	Read Defined Variable [TT] (MPU1)tbcu3_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10252	R	Read Defined Variable [TT] (MPU1)tbcu4_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10253	R	Read Defined Variable [TT] (MPU1)BCU2_BrakeNotApp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10254	R	Read Defined Variable [TT] (MPU1)bcu1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10255	A	Remove manometer on M4 BCTP point		OK		Alleta Sekgololo - 417407	Train

10256	I	M1 service brake manual isolation		OK		Alleta Sekgololo - 417407	Train
10257	A	Close the isolation cock C2.3.1		OK		Alleta Sekgololo - 417407	Train
10258	R	Message on DDU warning the maintenance/driver for repair at the end of the day. IOS 883: "Mechanical Brake manually isolated on M1"		OK		Alleta Sekgololo - 417407	Train
10259	R	Lamp 40H2 is ON for EB reduced on the alarm module		OK		Alleta Sekgololo - 417407	Train
10260	A	Put manometer on M1 BCTP point		OK		Alleta Sekgololo - 417407	Train
10261	R	Pressure measured on test point BCTP decreases slowly (drain the brake reservoir) until 0bar (+/-0,2bar)		OK		Alleta Sekgololo - 417407	Train
10262	R	Brake discs are not in contact with wheels on M1 bogies		OK		Alleta Sekgololo - 417407	Train
10263	R	Read Defined Variable [TT] (MPU1)bcu1_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10264	R	Read Defined Variable [TT] (MPU1)BCU2_ServBrakeIsolDC = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10265	R	Read Defined Variable [TT] (MPU1)TBCU1_servbrakeisoldc = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10266	R	Read Defined Variable [TT] (MPU1)tbcu2_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10267	R	Read Defined Variable [TT] (MPU1)tbcu3_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10268	R	Read Defined Variable [TT] (MPU1)tbcu4_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10269	R	Read Defined Variable [TT] (MPU1)li_sbk_tc1servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10270	R	Read Defined Variable [TT] (MPU1)li_sbk_m1servicebrakedc = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10271	R	Read Defined Variable [TT] (MPU1)li_sbk_m2servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10272	R	Read Defined Variable [TT] (MPU1)li_sbk_m3servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train

10273	R	Read Defined Variable [TT] (MPU1)li_sbk_m4servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10274	R	Read Defined Variable [TT] (MPU1)li_sbk_tc2servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10275	R	Read Defined Variable [TT] (MPU1)TBCU1_brakenotapp = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10276	R	Read Defined Variable [TT] (MPU1)tbcu2_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10277	R	Read Defined Variable [TT] (MPU1)tbcu3_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10278	R	Read Defined Variable [TT] (MPU1)tbcu4_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10279	R	Read Defined Variable [TT] (MPU1)BCU2_BrakeNotApp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10280	R	Read Defined Variable [TT] (MPU1)bcu1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10281	A	Open the isolation cock C2.3.1		OK		Alleta Sekgololo - 417407	Train
10282	R	Lamp 40H2 is OFF for EB reduced on the alarm module		OK		Alleta Sekgololo - 417407	Train
10283	R	Pressure measured on test point BCTP increases slowly (brake reservoir) until service brake pressure in M1 car reaches 1,49bar (+/-0,2bar)		OK		Alleta Sekgololo - 417407	Train
10284	R	Brake discs are in contact with wheels on M1 bogies		OK		Alleta Sekgololo - 417407	Train
10285	R	Read Defined Variable [TT] (MPU1)bcu1_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10286	R	Read Defined Variable [TT] (MPU1)BCU2_ServBrakeIsolDC = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10287	R	Read Defined Variable [TT] (MPU1)TBCU1_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10288	R	Read Defined Variable [TT] (MPU1)tbcu2_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10289	R	Read Defined Variable [TT] (MPU1)tbcu3_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train

10290	R	Read Defined Variable [TT] (MPU1)tbcu4_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10291	R	Read Defined Variable [TT] (MPU1)li_sbk_tc1servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10292	R	Read Defined Variable [TT] (MPU1)li_sbk_m1servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10293	R	Read Defined Variable [TT] (MPU1)li_sbk_m2servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10294	R	Read Defined Variable [TT] (MPU1)li_sbk_m2servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10295	R	Read Defined Variable [TT] (MPU1)li_sbk_m3servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10296	R	Read Defined Variable [TT] (MPU1)li_sbk_m4servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10297	R	Read Defined Variable [TT] (MPU1)li_sbk_tc2servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10298	R	Read Defined Variable [TT] (MPU1)TBCU1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10299	R	Read Defined Variable [TT] (MPU1)tbcu2_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10300	R	Read Defined Variable [TT] (MPU1)tbcu3_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10301	R	Read Defined Variable [TT] (MPU1)tbcu4_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10302	R	Read Defined Variable [TT] (MPU1)BCU2_BrakeNotApp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10303	R	Read Defined Variable [TT] (MPU1)bcu1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10304	A	Remove manometer on M1 BCTP point		OK		Alleta Sekgololo - 417407	Train
10305	I	M2 service brake manual isolation		OK		Alleta Sekgololo - 417407	Train
10306	A	Close the isolation cock C2.3.1		OK		Alleta Sekgololo - 417407	Train
10307	R	Lamp 40H2 is ON for EB reduced on the alarm module		OK		Alleta Sekgololo - 417407	Train

10308	A	Put manometer on M2 BCTP point		OK		Alleta Sekgololo - 417407	Train
10309	R	Pressure measured on test point BCTP decreases slowly (drain the brake reservoir) until 0bar (+/-0,2bar)		OK		Alleta Sekgololo - 417407	Train
10310	R	Read Defined Variable [TT] (MPU1)tbcu2_servbrakeisoldc = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10311	R	Brake discs are not in contact with wheels on M2 bogies		OK		Alleta Sekgololo - 417407	Train
10312	R	Read Defined Variable [TT] (MPU1)bcu1_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10313	R	Read Defined Variable [TT] (MPU1)BCU2_ServBrakeIsolDC = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10314	R	Read Defined Variable [TT] (MPU1)TBCU1_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10315	R	Read Defined Variable [TT] (MPU1)li_sbk_m2servicebrakedc = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10316	R	Read Defined Variable [TT] (MPU1)tbcu3_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10317	R	Read Defined Variable [TT] (MPU1)tbcu4_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10318	R	Read Defined Variable [TT] (MPU1)li_sbk_tc1servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10319	R	Read Defined Variable [TT] (MPU1)li_sbk_m1servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10320	R	Read Defined Variable [TT] (MPU1)li_sbk_m3servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10321	R	Read Defined Variable [TT] (MPU1)li_sbk_m4servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10322	R	Read Defined Variable [TT] (MPU1)li_sbk_tc2servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10323	R	Read Defined Variable [TT] (MPU1)TBCU1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10324	R	Read Defined Variable [TT] (MPU1)tbcu2_brakenotapp = 1.0		OK	1	Alleta Sekgololo - 417407	Train

10325	R	Read Defined Variable [TT] (MPU1)tbcu3_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10326	R	Read Defined Variable [TT] (MPU1)tbcu4_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10327	R	Read Defined Variable [TT] (MPU1)BCU2_BrakeNotApp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10328	R	Read Defined Variable [TT] (MPU1)bcu1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10329	A	Open the isolation cock C2.3.1		OK		Alleta Sekgololo - 417407	Train
10330	R	Lamp 40H2 is OFF for EB reduced on the alarm module		OK		Alleta Sekgololo - 417407	Train
10331	R	Pressure measured on test point BCTP increases slowly (brake reservoir) until service brake pressure in M2 car reaches 1,49bar (+/-0,2bar)		OK		Alleta Sekgololo - 417407	Train
10332	R	Brake discs are in contact with wheels on M2 bogies		OK		Alleta Sekgololo - 417407	Train
10333	R	Read Defined Variable [TT] (MPU1)bcu1_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10334	R	Read Defined Variable [TT] (MPU1)BCU2_ServBrakeIsolDC = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10335	R	Read Defined Variable [TT] (MPU1)TBCU1_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10336	R	Read Defined Variable [TT] (MPU1)tbcu3_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10337	R	Read Defined Variable [TT] (MPU1)tbcu4_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10338	R	Read Defined Variable [TT] (MPU1)li_sbk_tc1servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10339	R	Read Defined Variable [TT] (MPU1)li_sbk_m1servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10340	R	Read Defined Variable [TT] (MPU1)li_sbk_m3servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10341	R	Read Defined Variable [TT] (MPU1)li_sbk_m4servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train

10342	R	Read Defined Variable [TT] (MPU1)li_sbk_tc2servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10343	R	Read Defined Variable [TT] (MPU1)TBCU1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10344	R	Read Defined Variable [TT] (MPU1)tbcu3_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10345	R	Read Defined Variable [TT] (MPU1)tbcu4_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10346	R	Read Defined Variable [TT] (MPU1)BCU2_BrakeNotApp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10347	R	Read Defined Variable [TT] (MPU1)bcu1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10348	A	Remove manometer on M2 BCTP point		OK		Alleta Sekgololo - 417407	Train
10349	I	M3 Service brake manual isolation		OK		Alleta Sekgololo - 417407	Train
10350	A	Close the isolation cock C2.3.1		OK		Alleta Sekgololo - 417407	Train
10351	R	Message on DDU warning the maintenance/driver for repair at the end of the day. IOS 885: "Mechanical Brake manually isolated on M3"		OK		Alleta Sekgololo - 417407	Train
10352	R	Lamp 40H2 is ON for EB reduced on the alarm module		OK		Alleta Sekgololo - 417407	Train
10353	A	Put the manometer on the BCTP test point of M3		OK		Alleta Sekgololo - 417407	Train
10354	R	Pressure measured on test point BCTP decreases slowly (drain the brake reservoir) until 0bar (+/-0,2bar)		OK		Alleta Sekgololo - 417407	Train
10355	R	Brake discs are not in contact with wheels on M3 bogies		OK		Alleta Sekgololo - 417407	Train
10356	R	Read Defined Variable [TT] (MPU1)bcu1_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10357	R	Read Defined Variable [TT] (MPU1)BCU2_ServBrakeIsolDC = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10358	R	Read Defined Variable [TT] (MPU1)TBCU1_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train

10359	R	Read Defined Variable [TT] (MPU1)tbcu2_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10360	R	Read Defined Variable [TT] (MPU1)tbcu3_servbrakeisoldc = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10361	R	Read Defined Variable [TT] (MPU1)tbcu4_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10362	R	Read Defined Variable [TT] (MPU1)li_sbk_tc1servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10363	R	Read Defined Variable [TT] (MPU1)li_sbk_m1servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10364	R	Read Defined Variable [TT] (MPU1)li_sbk_m2servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10365	R	Read Defined Variable [TT] (MPU1)li_sbk_m3servicebrakedc = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10366	R	Read Defined Variable [TT] (MPU1)li_sbk_m4servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10367	R	Read Defined Variable [TT] (MPU1)li_sbk_tc2servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10368	R	Read Defined Variable [TT] (MPU1)TBCU1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10369	R	Read Defined Variable [TT] (MPU1)tbcu2_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10370	R	Read Defined Variable [TT] (MPU1)tbcu3_brakenotapp = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10371	R	Read Defined Variable [TT] (MPU1)tbcu4_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10372	R	Read Defined Variable [TT] (MPU1)BCU2_BrakeNotApp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10373	R	Read Defined Variable [TT] (BCU2)LI_BRAKE_NOT_APPLED = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10374	R	Read Defined Variable [TT] (TBCU1)LI_BRAKE_NOT_APPLED = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10375	R	Read Defined Variable [TT] (BCU1)LI_BRAKE_NOT_APPLED = 0.0		OK	0	Alleta Sekgololo - 417407	Train

10376	R	Read Defined Variable [TT] (TBCU2)LI_BRAKE_NOT_APPLED = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10377	R	Read Defined Variable [TT] (TBCU3)LI_BRAKE_NOT_APPLED = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10378	R	Read Defined Variable [TT] (TBCU4)LI_BRAKE_NOT_APPLED = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10379	R	Read Defined Variable [TT] (MPU1)bcu1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10380	A	Open the isolation cock C2.3.1		OK		Alleta Sekgololo - 417407	Train
10381	R	Lamp 40H2 is OFF for EB reduced on the alarm module		OK		Alleta Sekgololo - 417407	Train
10382	R	Pressure measured on test point BCTP increases slowly (brake reservoir) until service brake pressure in M3 car reaches 1,49bar (+/-0,2bar)		OK		Alleta Sekgololo - 417407	Train
10383	R	Brake discs are in contact with wheels on M3 bogies		OK		Alleta Sekgololo - 417407	Train
10384	R	Read Defined Variable [TT] (MPU1)bcu1_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10385	R	Read Defined Variable [TT] (MPU1)BCU2_ServBrakeIsolDC = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10386	R	Read Defined Variable [TT] (MPU1)TBCU1_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10387	R	Read Defined Variable [TT] (MPU1)tbcu2_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10388	R	Read Defined Variable [TT] (MPU1)tbcu3_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10389	R	Read Defined Variable [TT] (MPU1)tbcu4_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10390	R	Read Defined Variable [TT] (MPU1)li_sbk_tc1servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10391	R	Read Defined Variable [TT] (MPU1)li_sbk_m1servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10392	R	Read Defined Variable [TT] (MPU1)li_sbk_m2servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train

10393	R	Read Defined Variable [TT] (MPU1)li_sbk_m3servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10394	R	Read Defined Variable [TT] (MPU1)li_sbk_m4servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10395	R	Read Defined Variable [TT] (MPU1)li_sbk_tc2servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10396	R	Read Defined Variable [TT] (MPU1)TBCU1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10397	R	Read Defined Variable [TT] (MPU1)tbcu2_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10398	R	Read Defined Variable [TT] (MPU1)tbcu3_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10399	R	Read Defined Variable [TT] (MPU1)tbcu4_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10400	R	Read Defined Variable [TT] (MPU1)BCU2_BrakeNotApp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10401	R	Read Defined Variable [TT] (MPU1)bcu1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10402	A	Remove the manometer from the BCTP test point		OK		Alleta Sekgololo - 417407	Train
10403	I	TC2 Service brake manual isolation		OK		Alleta Sekgololo - 417407	Train
10404	A	Close the isolation cock C1.3.1		OK		Alleta Sekgololo - 417407	Train
10405	R	Message on DDU warning the maintenance/driver for repair at the end of the day. IOS 882 : "Mechanical Brake manually isolated on TC2"		OK		Alleta Sekgololo - 417407	Train
10406	R	Lamp 40H2 is ON for EB reduced on the alarm module		OK		Alleta Sekgololo - 417407	Train
10407	A	Put manometer on BCTP test point		OK		Alleta Sekgololo - 417407	Train
10408	R	Pressure measured on test point BCTP decreases slowly (drain the brake reservoir) until 0bar (+/-0,2bar)		OK		Alleta Sekgololo - 417407	Train
10409	R	Brake discs are not in contact with wheels on TC2 bogies		OK		Alleta Sekgololo - 417407	Train

10410	R	Read Defined Variable [TT] (MPU1)bcu1_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10411	R	Read Defined Variable [TT] (MPU1)BCU2_ServBrakeIsolDC = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10412	R	Read Defined Variable [TT] (MPU1)TBCU1_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10413	R	Read Defined Variable [TT] (MPU1)tbcu2_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10414	R	Read Defined Variable [TT] (MPU1)tbcu3_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10415	R	Read Defined Variable [TT] (MPU1)tbcu4_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10416	R	Read Defined Variable [TT] (MPU1)li_sbk_tc1servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10417	R	Read Defined Variable [TT] (MPU1)li_sbk_m1servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10418	R	Read Defined Variable [TT] (MPU1)li_sbk_m2servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10419	R	Read Defined Variable [TT] (MPU1)li_sbk_m3servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10420	R	Read Defined Variable [TT] (MPU1)li_sbk_m4servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10421	R	Read Defined Variable [TT] (MPU1)li_sbk_tc2servicebrakedc = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10422	R	Read Defined Variable [TT] (MPU1)TBCU1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10423	R	Read Defined Variable [TT] (MPU1)tbcu2_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10424	R	Read Defined Variable [TT] (MPU1)tbcu3_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10425	R	Read Defined Variable [TT] (MPU1)tbcu4_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10426	R	Read Defined Variable [TT] (MPU1)BCU2_BrakeNotApp = 1.0		OK	1	Alleta Sekgololo - 417407	Train

10427	R	Read Defined Variable [TT] (MPU1)bcu1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10428	A	Open the isolation cock C1.3.1		OK		Alleta Sekgololo - 417407	Train
10429	R	Lamp 40H2 is OFF for EB reduced on the alarm module		OK		Alleta Sekgololo - 417407	Train
10430	A	Put the manometer on the BCTP point in TC2		OK		Alleta Sekgololo - 417407	Train
10431	R	Pressure measured on test point BCTP increases slowly (brake reservoir) until service brake pressure in TC car reaches 1,47bar (+/-0,2bar)		OK		Alleta Sekgololo - 417407	Train
10432	R	Read Defined Variable [TT] (BCU2)LI_BRAKE_NOT_APPLED = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10433	R	Read Defined Variable [TT] (TBCU1)LI_BRAKE_NOT_APPLED = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10434	R	Read Defined Variable [TT] (BCU1)LI_BRAKE_NOT_APPLED = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10435	R	Read Defined Variable [TT] (TBCU2)LI_BRAKE_NOT_APPLED = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10436	R	Read Defined Variable [TT] (TBCU3)LI_BRAKE_NOT_APPLED = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10437	R	Read Defined Variable [TT] (TBCU4)LI_BRAKE_NOT_APPLED = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10438	R	Brake discs are in contact with wheels on TC2 bogies		OK		Alleta Sekgololo - 417407	Train
10439	R	Read Defined Variable [TT] (MPU1)bcu1_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10440	R	Read Defined Variable [TT] (MPU1)BCU2_ServBrakeIsolDC = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10441	R	Read Defined Variable [TT] (MPU1)TBCU1_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10442	R	Read Defined Variable [TT] (MPU1)tbcu2_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10443	R	Read Defined Variable [TT] (MPU1)tbcu3_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train

10444	R	Read Defined Variable [TT] (MPU1)tbcu4_servbrakeisoldc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10445	R	Read Defined Variable [TT] (MPU1)li_sbk_tc1servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10446	R	Read Defined Variable [TT] (MPU1)li_sbk_m1servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10447	R	Read Defined Variable [TT] (MPU1)li_sbk_m2servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10448	R	Read Defined Variable [TT] (MPU1)li_sbk_m3servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10449	R	Read Defined Variable [TT] (MPU1)li_sbk_tc2servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10450	R	Read Defined Variable [TT] (MPU1)li_sbk_m4servicebrakedc = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10451	R	Read Defined Variable [TT] (MPU1)TBCU1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10452	R	Read Defined Variable [TT] (MPU1)tbcu2_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10453	R	Read Defined Variable [TT] (MPU1)tbcu3_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10454	R	Read Defined Variable [TT] (MPU1)tbcu4_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10455	R	Read Defined Variable [TT] (MPU1)BCU2_BrakeNotApp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10456	R	Read Defined Variable [TT] (MPU1)bcu1_brakenotapp = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10457	A	Remove the manometer from the BCTP point of TC2		OK		Alleta Sekgololo - 417407	Train
10458	I	BCU Fault Test		OK		Alleta Sekgololo - 417407	Train
10459	I	Emergency brake must be applied to force the variables mentioned. After forcing the variables, release emergency brake.		OK		Alleta Sekgololo - 417407	Train
10460	A	Position the master controller on OFF position		OK		Alleta Sekgololo - 417407	Train

10461	A	Put the direction selector switch in Neutral position		OK		Alleta Sekgololo - 417407	Train
10462	A	Force [TT] (BCU1)LO_BRK_FLT = 0.0		OK		Alleta Sekgololo - 417407	Train
10463	R	Read Defined Variable [TT] (MPU1)li_sbk_tc1bcufault = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10464	A	Release [TT] (BCU1)LO_BRK_FLT		OK		Alleta Sekgololo - 417407	Train
10465	R	Read Defined Variable [TT] (MPU1)li_sbk_tc1bcufault = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10466	A	Force [TT] (TBCU4)LO_BRK_FLT = 0.0		OK		Alleta Sekgololo - 417407	Train
10467	R	Read Defined Variable [TT] (MPU1)li_sbk_m4bcufault = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10468	A	Release [TT] (TBCU4)LO_BRK_FLT		OK		Alleta Sekgololo - 417407	Train
10469	R	Read Defined Variable [TT] (MPU1)li_sbk_m4bcufault = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10470	A	Force [TT] (TBCU2)LO_BRK_FLT = 0.0		OK		Alleta Sekgololo - 417407	Train
10471	R	Read Defined Variable [TT] (MPU1)li_sbk_m2bcufault = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10472	A	Release [TT] (TBCU2)LO_BRK_FLT		OK		Alleta Sekgololo - 417407	Train
10473	R	Read Defined Variable [TT] (MPU1)li_sbk_m2bcufault = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10474	A	Force [TT] (TBCU1)LO_BRK_FLT = 0.0		OK		Alleta Sekgololo - 417407	Train
10475	R	Read Defined Variable [TT] (MPU1)li_sbk_m1bcufault = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10476	A	Release [TT] (TBCU1)LO_BRK_FLT		OK		Alleta Sekgololo - 417407	Train
10477	R	Read Defined Variable [TT] (MPU1)li_sbk_m1bcufault = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10478	A	Force [TT] (TBCU3)LO_BRK_FLT = 0.0		OK		Alleta Sekgololo - 417407	Train
10479	R	Read Defined Variable [TT] (MPU1)li_sbk_m3bcufault = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10480	A	Release [TT] (TBCU3)LO_BRK_FLT		OK		Alleta Sekgololo - 417407	Train

10481	R	Read Defined Variable [TT] (MPU1)li_sbk_m3bcufault = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10482	A	Force [TT] (BCU2)LO_BRK_FLT = 0.0		OK		Alleta Sekgololo - 417407	Train
10483	R	Read Defined Variable [TT] (MPU1)li_sbk_tc2bcufault = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10484	A	Release [TT] (BCU2)LO_BRK_FLT		OK		Alleta Sekgololo - 417407	Train
10485	R	Read Defined Variable [TT] (MPU1)li_sbk_tc2bcufault = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10486	I	Wheel Slide test		OK		Alleta Sekgololo - 417407	Train
10487	A	On DDU from TC1 car, request the WSP test on test screen and perform the actions shown on DDU.		OK		Alleta Sekgololo - 417407	Train
10488	I	To request the WSP test, go to test screen and request the brake test. Perform the Parking brake test. After the parking brake test, the WSP test will be available.		OK		Alleta Sekgololo - 417407	Train
10489	I	Safety requirement: [Prasa1-56]		OK		Alleta Sekgololo - 417407	Train
10490	R	Read Defined Variable [TT] (MPU1)BCU2_BcuTstOk = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10491	R	Read Defined Variable [TT] (MPU1)TBCU1_BcuTstOk = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10492	R	Read Defined Variable [TT] (MPU1)TBCU2_BcuTstOk = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10493	R	Read Defined Variable [TT] (MPU1)TBCU3_BcuTstOk = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10494	R	Read Defined Variable [TT] (MPU1)TBCU4_BcuTstOk = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10495	A	Force [TT] (MPU1)lo_sbk_tc1slipslidelampr1 = 1.0		OK		Alleta Sekgololo - 417407	Train
10496	A	Force [TT] (MPU1)lo_sbk_tc1slipslidelampr2 = 0.0		OK		Alleta Sekgololo - 417407	Train
10497	R	The visual indication of wheel slide detection (41H1) on the alarm module is ON.		OK		Alleta Sekgololo - 417407	Train

10498	A	Force [TT] (MPU1)lo_sbk_tc1slipslidelampr1 = 0.0		OK		Alleta Sekgololo - 417407	Train
10499	A	Force [TT] (MPU1)lo_sbk_tc1slipslidelampr2 = 1.0		OK		Alleta Sekgololo - 417407	Train
10500	R	The visual indication of wheel slide detection (41H1) on the alarm module is ON.		OK		Alleta Sekgololo - 417407	Train
10501	A	Force [TT] (MPU1)lo_sbk_tc1slipslidelampr1 = 1.0		OK		Alleta Sekgololo - 417407	Train
10502	A	Force [TT] (MPU1)lo_sbk_tc1slipslidelampr2 = 1.0		OK		Alleta Sekgololo - 417407	Train
10503	R	The visual indication of wheel slide detection (41H1) on the alarm module is ON.		OK		Alleta Sekgololo - 417407	Train
10504	A	Force [TT] (MPU1)lo_sbk_tc1slipslidelampr1 = 0.0		OK		Alleta Sekgololo - 417407	Train
10505	A	Force [TT] (MPU1)lo_sbk_tc1slipslidelampr2 = 0.0		OK		Alleta Sekgololo - 417407	Train
10506	R	The visual indication of wheel slide detection (41H1) on the alarm module is OFF.		OK		Alleta Sekgololo - 417407	Train
10507	A	Release [TT] (MPU1)lo_sbk_tc1slipslidelampr1		OK		Alleta Sekgololo - 417407	Train
10508	A	Release [TT] (MPU1)lo_sbk_tc1slipslidelampr2		OK		Alleta Sekgololo - 417407	Train
10509	I	End of Test		OK		Alleta Sekgololo - 417407	Train

Section 16 – Emergency Brake Interlock

16.3 Instructions list

16.3.1 044_UBK-Emergency Brake Interlock

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	Emergency Brake SPP=044 UBK		OK		Mphato Mphahlele - 480716	Train
10002	I	Emergency Brake Cylinder Pressure		OK		Alleta Sekgololo - 417407	Train
10003	I	Pressure in the main pipe should be 10 bar +/- 0.2bar		OK		Alleta Sekgololo - 417407	Train
10004	I	The direction selector switch is in Neutral position		OK		Alleta Sekgololo - 417407	Train
10005	I	Emergency brake is applied		OK		Alleta Sekgololo - 417407	Train
10006	A	Measure the pressure of the BCTP point in all cars with a calibrated manometer		OK		Alleta Sekgololo - 417407	Train
10007	R	BCTP TC1 Result Min/Max : 157<= x <= 197 (kPa)		OK	169	Alleta Sekgololo - 417407	Train
10008	R	BCTP M4 Result Min/Max : 187<= x <= 227 (kPa)		OK	187.5	Alleta Sekgololo - 417407	Train
10009	R	BCTP M1 Result Min/Max : 192<= x <= 232 (kPa)		OK	200	Alleta Sekgololo - 417407	Train
10010	R	BCTP M2 Result Min/Max : 192<= x <= 232 (kPa)		OK	199.9	Alleta Sekgololo - 417407	Train
10011	R	BCTP M3 Result Min/Max : 187<= x <= 227 (kPa)		OK	202.1	Alleta Sekgololo - 417407	Train
10012	R	BCTP TC2 Result Min/Max : 157<= x <= 197 (kPa)		OK	185.3	Celiwe Sokhela - 491462	Train
10013	I	Emergency brake TC1		OK		Mphato Mphahlele - 480716	Train
10014	I	Emergency brake by Direction Switch TC1		OK		Mphato Mphahlele - 480716	Train
10015	I	Direction selector switch is in NEUTRAL position		OK		Mphato Mphahlele - 480716	Train
10016	A	Active cab on TC1		OK		Mphato Mphahlele - 480716	Train
10017	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10018	R	Read Defined Variable [TT] (MPU1)BCU2_TlNeb = 0.0		OK	0	Mphato Mphahlele - 480716	Train

10019	R	Read Defined Variable [TT] (MPU1)bcu1_tlneb = 0.0		OK	0	Mphato Mphahlele - 480716	Train
10020	R	Read Defined Variable [TT] (MPU1)tbcu2_tlneb = 0.0		OK	0	Mphato Mphahlele - 480716	Train
10021	R	Read Defined Variable [TT] (MPU1)TBCU1_tlneb = 0.0		OK	0	Mphato Mphahlele - 480716	Train
10022	R	Read Defined Variable [TT] (MPU1)tbcu3_tlneb = 0.0		OK	0	Mphato Mphahlele - 480716	Train
10023	R	Read Defined Variable [TT] (MPU1)tbcu4_tlneb = 0.0		OK	0	Mphato Mphahlele - 480716	Train
10024	A	Put the direction selector switch in FORWARD position		OK		Mphato Mphahlele - 480716	Train
10025	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 0.0		OK	0	Mphato Mphahlele - 480716	Train
10026	R	Read Defined Variable [TT] (MPU1)BCU2_TlNeb = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10027	R	Read Defined Variable [TT] (MPU1)bcu1_tlneb = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10028	R	Read Defined Variable [TT] (MPU1)tbcu2_tlneb = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10029	R	Read Defined Variable [TT] (MPU1)TBCU1_tlneb = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10030	R	Read Defined Variable [TT] (MPU1)tbcu3_tlneb = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10031	R	Read Defined Variable [TT] (MPU1)tbcu4_tlneb = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10032	A	Put the direction selector switch in REVERSE position		OK		Mphato Mphahlele - 480716	Train
10033	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 0.0		OK	0	Mphato Mphahlele - 480716	Train
10034	R	Read Defined Variable [TT] (MPU1)BCU2_TlNeb = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10035	R	Read Defined Variable [TT] (MPU1)bcu1_tlneb = 1.0		OK	1	Mphato Mphahlele - 480716	Train

10036	R	Read Defined Variable [TT] (MPU1)tbcu2_tlneb = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10037	R	Read Defined Variable [TT] (MPU1)TBCU1_tlneb = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10038	R	Read Defined Variable [TT] (MPU1)tbcu3_tlneb = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10039	R	Read Defined Variable [TT] (MPU1)tbcu4_tlneb = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10040	A	Put the direction selector switch in NEUTRAL position		OK		Mphato Mphahlele - 480716	Train
10041	I	Emergency Brake Button TC1		OK		Mphato Mphahlele - 480716	Train
10042	A	Put the direction selector switch in FORWARD position		OK		Mphato Mphahlele - 480716	Train
10043	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 0.0		OK	0	Mphato Mphahlele - 480716	Train
10044	A	Apply emergency brake using the red button 44S1		OK		Mphato Mphahlele - 480716	Train
10045	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10046	A	Release the button 44S1		OK		Mphato Mphahlele - 480716	Train
10047	A	Put the direction selector switch in NEUTRAL Position and again in FORWARD position to reset the emergency brake		OK		Mphato Mphahlele - 480716	Train
10048	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 0.0		OK	0	Mphato Mphahlele - 480716	Train
10049	A	On the non-active cab TC2, apply emergency brake using the red button 44S1		OK		Mphato Mphahlele - 480716	Train
10050	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10051	A	Release the button 44S1		OK		Mphato Mphahlele - 480716	Train
10052	A	Put the direction selector switch in NEUTRAL position		OK		Mphato Mphahlele - 480716	Train

10053	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10054	I	Emergency Brake by Master controller TC1		OK		Mphato Mphahlele - 480716	Train
10055	A	Put the direction selector switch in FORWARD position		OK		Mphato Mphahlele - 480716	Train
10056	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 0.0		OK	0	Mphato Mphahlele - 480716	Train
10057	A	Put the master controller in EMERGENCY BRAKE position		OK		Mphato Mphahlele - 480716	Train
10058	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10059	A	Put the master controller in OFF position		OK		Mphato Mphahlele - 480716	Train
10060	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10061	I	PEA override TC1		OK		Mphato Mphahlele - 480716	Train
10062	A	Put the direction selector switch in FORWARD position		OK		Mphato Mphahlele - 480716	Train
10063	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 0.0		OK	0	Mphato Mphahlele - 480716	Train
10064	R	Lamp 44H5 is OFF		OK		Mphato Mphahlele - 480716	Train
10065	A	Pull any PEA on train		OK		Mphato Mphahlele - 480716	Train
10066	R	Lamp 44H5 is ON		OK		Mphato Mphahlele - 480716	Train
10067	A	Press the PEA override button 44S5		OK		Mphato Mphahlele - 480716	Train
10068	A	Reset the PEA by switch 44S6		OK		Mphato Mphahlele - 480716	Train
10069	R	Lamp 44H5 is OFF		OK		Mphato Mphahlele - 480716	Train
10070	A	Press the button 44S5 to normalize PEA override		OK		Mphato Mphahlele - 480716	Train
10071	I	Emergency brake TC2		OK		Mphato Mphahlele - 480716	Train
10072	I	Emergency brake by Direction Switch TC2		OK		Mphato Mphahlele - 480716	Train

10073	I	Direction selector switch is in NEUTRAL position		OK		Mphato Mphahlele - 480716	Train
10074	A	Switch active cab to TC2		OK		Mphato Mphahlele - 480716	Train
10075	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10076	R	Read Defined Variable [TT] (MPU1)BCU2_TINeb = 0.0		OK	0	Mphato Mphahlele - 480716	Train
10077	R	Read Defined Variable [TT] (MPU1)bcu1_tlneb = 0.0		OK	0	Mphato Mphahlele - 480716	Train
10078	R	Read Defined Variable [TT] (MPU1)tbcu2_tlneb = 0.0		OK	0	Mphato Mphahlele - 480716	Train
10079	R	Read Defined Variable [TT] (MPU1)TBCU1_tlneb = 0.0		OK	0	Mphato Mphahlele - 480716	Train
10080	R	Read Defined Variable [TT] (MPU1)tbcu3_tlneb = 0.0		OK	0	Mphato Mphahlele - 480716	Train
10081	R	Read Defined Variable [TT] (MPU1)tbcu4_tlneb = 0.0		OK	0	Mphato Mphahlele - 480716	Train
10082	A	Put the direction selector switch in FORWARD position		OK		Mphato Mphahlele - 480716	Train
10083	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 0.0		OK	0	Mphato Mphahlele - 480716	Train
10084	R	Read Defined Variable [TT] (MPU1)BCU2_TINeb = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10085	R	Read Defined Variable [TT] (MPU1)bcu1_tlneb = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10086	R	Read Defined Variable [TT] (MPU1)tbcu2_tlneb = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10087	R	Read Defined Variable [TT] (MPU1)TBCU1_tlneb = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10088	R	Read Defined Variable [TT] (MPU1)tbcu3_tlneb = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10089	R	Read Defined Variable [TT] (MPU1)tbcu4_tlneb = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10090	A	Put the direction selector switch in REVERSE position		OK		Mphato Mphahlele - 480716	Train

10091	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 0.0		OK	0	Mphato Mphahlele - 480716	Train
10092	R	Read Defined Variable [TT] (MPU1)BCU2_TlNeb = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10093	R	Read Defined Variable [TT] (MPU1)bcu1_tlneb = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10094	R	Read Defined Variable [TT] (MPU1)tbcu2_tlneb = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10095	R	Read Defined Variable [TT] (MPU1)TBCU1_tlneb = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10096	R	Read Defined Variable [TT] (MPU1)tbcu3_tlneb = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10097	R	Read Defined Variable [TT] (MPU1)tbcu4_tlneb = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10098	I	Emergency Brake Button TC2		OK		Mphato Mphahlele - 480716	Train
10099	A	Apply emergency brake using the red button 44S1		OK		Mphato Mphahlele - 480716	Train
10100	A	Put the direction selector switch in FORWARD position		OK		Mphato Mphahlele - 480716	Train
10101	A	Release the button 44S1		OK		Mphato Mphahlele - 480716	Train
10102	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10103	A	Put the direction selector switch in NEUTRAL position and again in FORWARD position to reset the emergency brake		OK		Mphato Mphahlele - 480716	Train
10104	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 0.0		OK	0	Mphato Mphahlele - 480716	Train
10105	A	On the non-active can TC1, apply emergency brake using the red button 44S1		OK		Mphato Mphahlele - 480716	Train
10106	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10107	A	Release the button 44S1		OK		Mphato Mphahlele - 480716	Train

10108	A	Put the direction selector switch in NEUTRAL position and again in FORWARD position to reset the emergency brake		OK		Mphato Mphahlele - 480716	Train
10109	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 0.0		OK	0	Mphato Mphahlele - 480716	Train
10110	A	Put the direction selector switch in NEUTRAL position		OK		Mphato Mphahlele - 480716	Train
10111	I	Emergency Brake by Master controller TC2		OK		Mphato Mphahlele - 480716	Train
10112	A	Put the direction selector switch in FORWARD position		OK		Mphato Mphahlele - 480716	Train
10113	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 0.0		OK	0	Mphato Mphahlele - 480716	Train
10114	A	Put the master controller in EMERGENCY BRAKE position		OK		Mphato Mphahlele - 480716	Train
10115	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10116	A	Put the master controller in OFF position		OK		Mphato Mphahlele - 480716	Train
10117	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 1.0		OK	1	Mphato Mphahlele - 480716	Train
10118	I	PEA override TC2		OK		Mphato Mphahlele - 480716	Train
10119	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 0.0		OK	0	Mphato Mphahlele - 480716	Train
10120	A	Pull any PEA on train		OK		Mphato Mphahlele - 480716	Train
10121	R	Lamp 44H5 is ON		OK		Mphato Mphahlele - 480716	Train
10122	A	Press the PEA override button 44S5		OK		Mphato Mphahlele - 480716	Train
10123	A	Reset the PEA by switch 44S6		OK		Mphato Mphahlele - 480716	Train
10124	R	Lamp 44H5 is OFF		OK		Mphato Mphahlele - 480716	Train
10125	A	Press the button 44S5 to normalize PEA override		OK		Mphato Mphahlele - 480716	Train

10126	A	Put the direction selector switch in Neutral and FORWARD position		OK		Mphato Mphahlele - 480716	Train
10127	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 0.0		OK	0	Mphato Mphahlele - 480716	Train
10128	I	Low Pressure		OK		Mphato Mphahlele - 480716	Train
10129	A	Force [TT] (MPU1)lo_air_tc1compenabler1 = 0.0		OK		Mphato Mphahlele - 480716	Train
10130	A	Force [TT] (MPU1)lo_air_tc1compenabler2 = 0.0		OK		Mphato Mphahlele - 480716	Train
10131	A	Force [TT] (MPU1)lo_air_tc2compenabler1 = 0.0		OK		Mphato Mphahlele - 480716	Train
10132	A	Force [TT] (MPU1)lo_air_tc2compenabler2 = 0.0		OK		Mphato Mphahlele - 480716	Train
10133	R	Drain the air in the main pipe until it reaches below 6 bar, i.e. drain air to reach the range 5-5.5 bar		OK		Alleta Sekgololo - 417407	Train
10134	R	On DDU screen, emergency brake due to low pressure appears		OK		Alleta Sekgololo - 417407	Train
10135	R	Read Defined Variable [TT] (BCU1)li_mp_ps_ok = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10136	R	Read Defined Variable [TT] (BCU2)li_mp_ps_ok = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10137	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10138	A	Release [TT] (MPU1)lo_air_tc1compenabler1		OK		Alleta Sekgololo - 417407	Train
10139	A	Release [TT] (MPU1)lo_air_tc1compenabler2		OK		Alleta Sekgololo - 417407	Train
10140	A	Release [TT] (MPU1)lo_air_tc2compenabler2		OK		Alleta Sekgololo - 417407	Train
10141	A	Release [TT] (MPU1)lo_air_tc2compenabler1		OK		Alleta Sekgololo - 417407	Train
10142	I	The pressure in the main pipe should be at least 7 bar for emergency brake to be released		OK		Alleta Sekgololo - 417407	Train

10143	A	Put the direction selector switch in NEUTRAL position and again in FORWARD position		OK		Alleta Sekgololo - 417407	Train
10144	R	Read Defined Variable [TT] (BCU1)li_mp_ps_ok = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10145	R	Read Defined Variable [TT] (BCU2)li_mp_ps_ok = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10146	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 0.0		OK	0	Alleta Sekgololo - 417407	Train
10147	I	End of Test		OK		Alleta Sekgololo - 417407	Train

Section 17 – Fire Detection

17.3 Instructions list

17.3.1 067_FSD-Fire Detection

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	Fire Detection SPP= 067		OK		Anthonia Mabowa - 494131	Train
10002	I	Start of Test		OK		Anthonia Mabowa - 494131	Train
10003	A	Turn the key to Active cab		OK		Anthonia Mabowa - 494131	Train
10004	A	Close the battery contactor 18S1		OK		Anthonia Mabowa - 494131	Train
10005	A	Press the automatic start button 20S1 to prepare the train in High voltage		OK		Anthonia Mabowa - 494131	Train
10006	R	Read Defined Variable [TT] PNT_AllPantoRaised = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10007	R	Read Defined Variable [TT] HSC_HscbClosedNum = 2.0		OK	2	Anthonia Mabowa - 494131	Train
10008	R	Read Defined Variable [TT] (MPU1)NET_FDCUPresCIP = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10009	R	Read Defined Variable [TT] (MPU1)FSD_FireSystemOk = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10010	R	Read Defined Variable [TT] (MPU1)FSD_FireLocation = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10011	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10012	R	Read Defined Variable [TT] (MPU1)FDCU_Data2 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10013	R	Read Defined Variable [TT] (MPU1)FDCU_Data3 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10014	R	Read Defined Variable [TT] (MPU1)FDCU_DiagData = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10015	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 17.0		OK	17	Anthonia Mabowa - 494131	Train
10016	I	Fire Detection Simulation test in Saloon		OK		Anthonia Mabowa - 494131	Train

10017	I	In order to see the CCTV footage where fire was simulated, navigate through the ISO event.		OK		Anthonia Mabowa - 494131	Train
10018	I	Both cameras will be activated when a fire is detected in the saloon		OK		Anthonia Mabowa - 494131	Train
10019	I	All HVACs are operational		OK		Anthonia Mabowa - 494131	Train
10020	I	TC1		OK		Anthonia Mabowa - 494131	Train
10021	A	Simulate a fire by spraying the gas on the fire detection unit 67A4 on TC1 cab for at least 1s		OK		Anthonia Mabowa - 494131	Train
10022	R	67H1 becomes "ON" on the Alarm Module and the DDU also shows the fire location		OK		Anthonia Mabowa - 494131	Train
10023	R	HVAC stops working in the cab and TC1 saloon		OK		Anthonia Mabowa - 494131	Train
10024	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 49.0		OK	49	Anthonia Mabowa - 494131	Train
10025	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10026	A	Reset the fire detection loop on the DDU		OK		Anthonia Mabowa - 494131	Train
10027	R	67H1 turns OFF on the Alarm Module and NO fire detected on the DDU		OK		Anthonia Mabowa - 494131	Train
10028	R	The HVAC of TC1 Cab and Saloon starts working in normal condition		OK		Anthonia Mabowa - 494131	Train
10029	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10030	A	It takes about 40 seconds for the variable "FDCU_Status" below to change to 17. Read the variable before the next simulation.		OK		Anthonia Mabowa - 494131	Train
10031	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 17.0		OK	17	Anthonia Mabowa - 494131	Train
10032	A	Simulate a fire by spraying the gas on the fire detection unit 67A2 on TC1 car for at least 1s		OK		Anthonia Mabowa - 494131	Train
10033	R	The CCTV footage showing TC1 saloon where the fire was detected is shown on		OK		Anthonia Mabowa - 494131	Train

		the DDU					
10034	R	67H1 becomes "ON" on the Alarm Module and the DDU also shows the fire location		OK		Anthonia Mabowa - 494131	Train
10035	R	HVAC stop working in TC1 saloon.		OK		Anthonia Mabowa - 494131	Train
10036	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 49.0		OK	49	Anthonia Mabowa - 494131	Train
10037	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 2.0		OK	2	Anthonia Mabowa - 494131	Train
10038	A	Reset the fire detection loop on the DDU		OK		Anthonia Mabowa - 494131	Train
10039	R	HVAC starts working in TC1 saloon		OK		Anthonia Mabowa - 494131	Train
10040	R	Camera footage disappears from the DDU screen		OK		Anthonia Mabowa - 494131	Train
10041	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10042	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 17.0		OK	17	Anthonia Mabowa - 494131	Train
10043	A	Simulate a fire by spraying the gas on the fire detection unit 67A3 on TC1 car for at least 1s		OK		Anthonia Mabowa - 494131	Train
10044	R	The CCTV footage showing TC1 saloon where the fire was detected is shown on the DDU		OK		Anthonia Mabowa - 494131	Train
10045	R	67H1 becomes "ON" on the Alarm Module and the DDU also shows the fire location		OK		Anthonia Mabowa - 494131	Train
10046	R	HVAC stop working in TC1 saloon		OK		Anthonia Mabowa - 494131	Train
10047	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 49.0		OK	49	Anthonia Mabowa - 494131	Train
10048	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 4.0		OK	4	Anthonia Mabowa - 494131	Train
10049	A	Reset the fire detection loop on the DDU		OK		Anthonia Mabowa - 494131	Train
10050	R	HVAC starts working in TC1 saloon		OK		Anthonia Mabowa - 494131	Train

10051	R	Camera footage disappears from the DDU screen		OK		Anthonia Mabowa - 494131	Train
10052	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10053	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 17.0		OK	17	Anthonia Mabowa - 494131	Train
10054	I	M4 car Test		OK		Anthonia Mabowa - 494131	Train
10055	A	Simulate a fire by spraying the gas on the fire detection unit 67A2 on M4 car for at least 1s		OK		Anthonia Mabowa - 494131	Train
10056	R	The CCTV footage showing M4 saloon where the fire was detected is shown on the DDU		OK		Anthonia Mabowa - 494131	Train
10057	R	67H1 becomes "ON" on the Alarm Module and the DDU also shows the fire location		OK		Anthonia Mabowa - 494131	Train
10058	R	HVAC unit stop in M4 saloon.		OK		Anthonia Mabowa - 494131	Train
10059	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 49.0		OK	49	Anthonia Mabowa - 494131	Train
10060	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 32.0		OK	32	Anthonia Mabowa - 494131	Train
10061	A	Reset the fire detection loop on the DDU		OK		Anthonia Mabowa - 494131	Train
10062	R	HVAC starts working in the saloon		OK		Anthonia Mabowa - 494131	Train
10063	R	Camera footage disappears from the DDU screen		OK		Anthonia Mabowa - 494131	Train
10064	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10065	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 17.0		OK	17	Anthonia Mabowa - 494131	Train
10066	A	Simulate a fire by spraying the gas on the fire detection unit 67A3 on M4 car for at least 1s		OK		Anthonia Mabowa - 494131	Train
10067	R	The CCTV footage showing M4 saloon where the fire was detected is shown on the DDU		OK		Anthonia Mabowa - 494131	Train

10068	R	67H1 becomes "ON" on the Alarm Module and the DDU also shows the fire location		OK		Anthonia Mabowa - 494131	Train
10069	R	HVAC stop working in the saloon		OK		Anthonia Mabowa - 494131	Train
10070	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 49.0		OK	49	Anthonia Mabowa - 494131	Train
10071	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 64.0		OK	64	Anthonia Mabowa - 494131	Train
10072	A	Reset the fire detection loop on the DDU		OK		Anthonia Mabowa - 494131	Train
10073	R	HVAC starts working in M4 saloon		OK		Anthonia Mabowa - 494131	Train
10074	R	Camera footage disappears from the DDU screen		OK		Anthonia Mabowa - 494131	Train
10075	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10076	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 17.0		OK	17	Anthonia Mabowa - 494131	Train
10077	I	M1 car		OK		Anthonia Mabowa - 494131	Train
10078	A	Simulate a fire by spraying the gas on the fire detection unit 67A2 on M1 car for at least 1s		OK		Anthonia Mabowa - 494131	Train
10079	R	The CCTV footage showing M1 saloon where the fire was detected is shown on the DDU		OK		Anthonia Mabowa - 494131	Train
10080	R	67H1 becomes "ON" on the Alarm Module and the DDU also shows the fire location		OK		Anthonia Mabowa - 494131	Train
10081	R	HVAC stop working on M1		OK		Anthonia Mabowa - 494131	Train
10082	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 49.0		OK	49	Anthonia Mabowa - 494131	Train
10083	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 256.0		OK	256	Anthonia Mabowa - 494131	Train
10084	A	Reset the fire detection loop on the DDU		OK		Anthonia Mabowa - 494131	Train
10085	R	HVAC starts working in M1 saloon		OK		Anthonia Mabowa - 494131	Train

10086	R	Camera footage disappears from the DDU screen		OK		Anthonia Mabowa - 494131	Train
10087	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10088	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 17.0		OK	17	Anthonia Mabowa - 494131	Train
10089	A	Simulate a fire by spraying the gas on the fire detection unit 67A3 on M1 car for at least 1s		OK		Anthonia Mabowa - 494131	Train
10090	R	The CCTV footage showing M1 saloon where the fire was detected is shown on the DDU		OK		Anthonia Mabowa - 494131	Train
10091	R	67H1 becomes "ON" on the Alarm Module and the DDU also shows the fire location		OK		Anthonia Mabowa - 494131	Train
10092	R	HVAC stop working in M1 saloon.		OK		Anthonia Mabowa - 494131	Train
10093	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 49.0		OK	49	Anthonia Mabowa - 494131	Train
10094	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 512.0		OK	512	Anthonia Mabowa - 494131	Train
10095	A	Reset the fire detection loop on the DDU		OK		Anthonia Mabowa - 494131	Train
10096	R	HVAC starts working in M1 saloon		OK		Anthonia Mabowa - 494131	Train
10097	R	Camera footage disappears from the DDU screen		OK		Anthonia Mabowa - 494131	Train
10098	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10099	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 17.0		OK	17	Anthonia Mabowa - 494131	Train
10100	I	M2 car Test		OK		Anthonia Mabowa - 494131	Train
10101	A	Simulate a fire by spraying the gas on the fire detection unit 67A3 on M2 for at least 1s		OK		Anthonia Mabowa - 494131	Train
10102	R	The CCTV footage showing M2 saloon where the fire was detected is shown on the DDU		OK		Anthonia Mabowa - 494131	Train

10103	R	67H1 becomes "ON" on the Alarm Module and the DDU also shows the fire location		OK		Anthonia Mabowa - 494131	Train
10104	R	HVAC stop working in M2		OK		Anthonia Mabowa - 494131	Train
10105	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 49.0		OK	49	Anthonia Mabowa - 494131	Train
10106	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 4096.0		OK	4096	Anthonia Mabowa - 494131	Train
10107	A	Reset the fire detection loop on the DDU		OK		Anthonia Mabowa - 494131	Train
10108	R	HVAC starts working in M2		OK		Anthonia Mabowa - 494131	Train
10109	R	Camera footage disappears from DDU screen		OK		Anthonia Mabowa - 494131	Train
10110	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10111	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 17.0		OK	17	Anthonia Mabowa - 494131	Train
10112	A	Simulate a fire by spraying the gas on the fire detection unit 67A2 on M2 for at least 1s		OK		Anthonia Mabowa - 494131	Train
10113	R	The CCTV footage showing M2 saloon where the fire was detected is shown on the DDU		OK		Anthonia Mabowa - 494131	Train
10114	R	67H1 becomes "ON" on the Alarm Module and the DDU also shows the fire location		OK		Anthonia Mabowa - 494131	Train
10115	R	HVAC stop working		OK		Anthonia Mabowa - 494131	Train
10116	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 49.0		OK	49	Anthonia Mabowa - 494131	Train
10117	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 2048.0		OK	2048	Anthonia Mabowa - 494131	Train
10118	A	Reset the fire detection loop on the DDU		OK		Anthonia Mabowa - 494131	Train
10119	R	HVAC starts working in M2		OK		Anthonia Mabowa - 494131	Train
10120	R	Camera footage disappears from the DDU screen		OK		Anthonia Mabowa - 494131	Train

10121	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10122	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 17.0		OK	17	Anthonia Mabowa - 494131	Train
10123	I	M3 car Test		OK		Anthonia Mabowa - 494131	Train
10124	A	Simulate a fire by spraying the gas on the fire detection unit 67A3 on M3 for at least 1s		OK		Anthonia Mabowa - 494131	Train
10125	R	The CCTV footage showing M3 saloon where the fire was detected is shown on the DDU		OK		Anthonia Mabowa - 494131	Train
10126	R	67H1 becomes "ON" on the Alarm Module and the DDU also shows the fire location		OK		Anthonia Mabowa - 494131	Train
10127	R	HVAC stop working in M3		OK		Anthonia Mabowa - 494131	Train
10128	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 49.0		OK	49	Anthonia Mabowa - 494131	Train
10129	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 32768.0		OK	32768	Anthonia Mabowa - 494131	Train
10130	A	Reset the fire detection loop on the DDU		OK		Anthonia Mabowa - 494131	Train
10131	R	HVAC starts working in M3		OK		Anthonia Mabowa - 494131	Train
10132	R	Camera footage disappears from the DDU screen		OK		Anthonia Mabowa - 494131	Train
10133	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10134	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 17.0		OK	17	Anthonia Mabowa - 494131	Train
10135	A	Simulate a fire by spraying the gas on the fire detection unit 67A2 on M3 for at least 1s		OK		Anthonia Mabowa - 494131	Train
10136	R	The CCTV footage showing M3 saloon where the fire was detected is shown on the DDU		OK		Anthonia Mabowa - 494131	Train
10137	R	67H1 becomes "ON" on the Alarm Module and the DDU also shows the fire location		OK		Anthonia Mabowa - 494131	Train

10138	R	HVAC stop working in M3		OK		Anthonia Mabowa - 494131	Train
10139	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 49.0		OK	49	Anthonia Mabowa - 494131	Train
10140	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 16384.0		OK	16384	Anthonia Mabowa - 494131	Train
10141	A	Reset the fire detection loop on the DDU		OK		Anthonia Mabowa - 494131	Train
10142	R	HVAC starts working in M3		OK		Anthonia Mabowa - 494131	Train
10143	R	Camera footage disappears from the DDU screen		OK		Anthonia Mabowa - 494131	Train
10144	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10145	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 17.0		OK	17	Anthonia Mabowa - 494131	Train
10146	I	TC2		OK		Anthonia Mabowa - 494131	Train
10147	A	Simulate a fire by spraying the gas on the fire detection unit 67A3 on TC2 for at least 1s		OK		Anthonia Mabowa - 494131	Train
10148	R	The CCTV footage showing TC2 saloon where the fire was detected is shown on the DDU		OK		Anthonia Mabowa - 494131	Train
10149	R	67H1 becomes "ON" on the Alarm Module and the DDU also shows the fire location		OK		Anthonia Mabowa - 494131	Train
10150	R	HVAC stops working in TC2 saloon		OK		Anthonia Mabowa - 494131	Train
10151	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 49.0		OK	49	Anthonia Mabowa - 494131	Train
10152	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 524288.0		OK	524288	Anthonia Mabowa - 494131	Train
10153	A	Reset the fire detection loop on the DDU		OK		Anthonia Mabowa - 494131	Train
10154	R	HVAC starts working in TC2		OK		Anthonia Mabowa - 494131	Train
10155	R	Camera footage disappears from the DDU screen		OK		Anthonia Mabowa - 494131	Train

10156	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10157	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 17.0		OK	17	Anthonia Mabowa - 494131	Train
10158	A	Simulate a fire by spraying the gas on the fire detection unit 67A2 on TC2 for at least 1s		OK		Anthonia Mabowa - 494131	Train
10159	R	The CCTV footage showing TC2 saloon where the fire was detected is shown on the DDU		OK		Anthonia Mabowa - 494131	Train
10160	R	67H1 becomes "ON" on the Alarm Module and the DDU also shows the fire location		OK		Anthonia Mabowa - 494131	Train
10161	R	HVAC stops working in TC2 saloon		OK		Anthonia Mabowa - 494131	Train
10162	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 49.0		OK	49	Anthonia Mabowa - 494131	Train
10163	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 262144.0		OK	262144	Anthonia Mabowa - 494131	Train
10164	A	Reset the fire detection loop on the DDU		OK		Anthonia Mabowa - 494131	Train
10165	R	HVAC starts working in TC2		OK		Anthonia Mabowa - 494131	Train
10166	R	Camera footage disappears from the DDU screen		OK		Anthonia Mabowa - 494131	Train
10167	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10168	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 17.0		OK	17	Anthonia Mabowa - 494131	Train
10169	A	Simulate a fire by spraying the gas on the fire detection unit 67A4 on TC2 cab for at least 1s		OK		Anthonia Mabowa - 494131	Train
10170	R	67H1 becomes "ON" on the Alarm Module of TC2 and TC1, and the DDU also shows the fire location		OK		Anthonia Mabowa - 494131	Train
10171	R	HVAC stops working in TC2 saloon		OK		Anthonia Mabowa - 494131	Train
10172	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 49.0		OK	49	Anthonia Mabowa - 494131	Train

10173	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 131072.0		OK	131072	Anthonia Mabowa - 494131	Train
10174	A	Reset the fire detection loop on the DDU		OK		Anthonia Mabowa - 494131	Train
10175	R	HVAC starts working in TC2		OK		Anthonia Mabowa - 494131	Train
10176	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10177	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 17.0		OK	17	Anthonia Mabowa - 494131	Train
10178	I	Fire Detection Simulation Underframe		OK		Anthonia Mabowa - 494131	Train
10179	I	TC2 ACU Test		OK		Anthonia Mabowa - 494131	Train
10180	A	Toggle the switch to activate a fire in the ACU		OK		Anthonia Mabowa - 494131	Train
10181	R	67H1 becomes "ON" on the Alarm Module and the DDU also shows the fire location		OK		Anthonia Mabowa - 494131	Train
10182	R	Read Undefined Variable [TT] (MPU1)FDCU_Data1		OK	2097152	Anthonia Mabowa - 494131	Train
10183	R	Read Defined Variable [TT] (MPU1)li_hsc_m1hscbopenr1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10184	R	Read Defined Variable [TT] (MPU1)li_hsc_m2hscbopenr1 = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10185	A	Remove the switch and put back the cover		OK		Anthonia Mabowa - 494131	Train
10186	A	Reset the fire detection loop from the DDU		OK		Anthonia Mabowa - 494131	Train
10187	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10188	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 17.0		OK	17	Anthonia Mabowa - 494131	Train
10189	I	M3 car propulsion box		OK		Anthonia Mabowa - 494131	Train
10190	A	Toggle the switch to activate a fire in M3 propulsion box		OK		Anthonia Mabowa - 494131	Train
10191	R	67H1 becomes "ON" on the Alarm Module and the DDU also shows the fire location		OK		Anthonia Mabowa - 494131	Train

10192	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 65536.0		OK	65536	Anthonia Mabowa - 494131	Train
10193	R	Confirm that the value above is 65536		OK		Anthonia Mabowa - 494131	Train
10194	A	Remove the switch and put back the cover		OK		Anthonia Mabowa - 494131	Train
10195	A	Reset the fire detection loop from the DDU		OK		Anthonia Mabowa - 494131	Train
10196	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10197	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 17.0		OK	17	Anthonia Mabowa - 494131	Train
10198	I	M2 car propulsion box		OK		Anthonia Mabowa - 494131	Train
10199	A	Toggle the switch to activate a fire in M2 propulsion box		OK		Anthonia Mabowa - 494131	Train
10200	R	67H1 becomes "ON" on the Alarm Module and the DDU also shows the fire location		OK		Anthonia Mabowa - 494131	Train
10201	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 8192.0		OK	8192	Anthonia Mabowa - 494131	Train
10202	A	Remove the switch and put back the cover		OK		Anthonia Mabowa - 494131	Train
10203	A	Reset the fire detection loop from the DDU		OK		Anthonia Mabowa - 494131	Train
10204	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10205	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 17.0		OK	17	Anthonia Mabowa - 494131	Train
10206	I	M1 car propulsion box		OK		Anthonia Mabowa - 494131	Train
10207	A	Toggle the switch to activate a fire in M1 propulsion box		OK		Anthonia Mabowa - 494131	Train
10208	R	67H1 becomes "ON" on the Alarm Module and the DDU also shows the fire location		OK		Anthonia Mabowa - 494131	Train
10209	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 1024.0		OK	1024	Anthonia Mabowa - 494131	Train

10210	R	Read Defined Variable [TT] (MPU1)li_hsc_m1hscbopenr1 = 1.0		OK	1	Anthonia Mabowa - 494131	Train
10211	A	Remove the switch and put back the cover		OK		Anthonia Mabowa - 494131	Train
10212	A	Reset the fire detection loop from the DDU		OK		Anthonia Mabowa - 494131	Train
10213	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10214	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 17.0		OK	17	Anthonia Mabowa - 494131	Train
10215	I	M4 Propulsion box		OK		Anthonia Mabowa - 494131	Train
10216	A	Toggle the switch to activate a fire in M4 Propulsion box		OK		Anthonia Mabowa - 494131	Train
10217	R	67H1 becomes "ON" on the Alarm Module and the DDU also shows the fire location		OK		Anthonia Mabowa - 494131	Train
10218	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 128.0		OK	128	Anthonia Mabowa - 494131	Train
10219	A	Remove the switch and put back the cover		OK		Anthonia Mabowa - 494131	Train
10220	A	Reset the fire detection loop from the DDU		OK		Anthonia Mabowa - 494131	Train
10221	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10222	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 17.0		OK	17	Anthonia Mabowa - 494131	Train
10223	I	TC1 ACU Test		OK		Anthonia Mabowa - 494131	Train
10224	A	Toggle the switch in TC1 to activate a fire in the ACU		OK		Anthonia Mabowa - 494131	Train
10225	R	67H1 becomes "ON" on the Alarm Module and the DDU also shows the fire location		OK		Anthonia Mabowa - 494131	Train
10226	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 16.0		OK	16	Anthonia Mabowa - 494131	Train
10227	A	Remove the switch and put back the cover		OK		Anthonia Mabowa - 494131	Train

10228	A	Reset the fire detection loop from the DDU		OK		Anthonia Mabowa - 494131	Train
10229	R	Read Defined Variable [TT] (MPU1)FDCU_Data1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10230	R	Read Defined Variable [TT] (MPU1)FDCU_Status = 17.0		OK	17	Anthonia Mabowa - 494131	Train
10231	A	Close the HSCB		OK		Anthonia Mabowa - 494131	Train
10232	R	Read Defined Variable [TT] (MPU1)li_hsc_m1hscbopenr1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10233	R	Read Defined Variable [TT] (MPU1)li_hsc_m2hscbopenr1 = 0.0		OK	0	Anthonia Mabowa - 494131	Train
10234	I	End of Test		OK		Anthonia Mabowa - 494131	Train

Section 18 – Passenger Doors

18.3 Instructions list

18.3.1 050_DOR-Passenger Doors

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	Doors SPP = 050 DOR		OK		Tshembhani Khosa - 446920	Train
10002	I	Initial Conditions		OK		Tshembhani Khosa - 446920	Train
10003	I	All doors should be closed		OK		Tshembhani Khosa - 446920	Train
10004	I	Speed less than 3km/h relay 61K3 is energized		OK		Tshembhani Khosa - 446920	Train
10005	I	Start of Test		OK		Tshembhani Khosa - 446920	Train
10006	I	Uploading procedure:		OK		Tshembhani Khosa - 446920	Train
10007	I	Follow the below instructions to upload software on all the doors		OK		Tshembhani Khosa - 446920	Train
10008	I	Doors functional Test TC1 Cab		OK		Tshembhani Khosa - 446920	Train
10009	I	Door authorization not possible in non-active cab		OK		Tshembhani Khosa - 446920	Train
10010	A	Remove active cab on TC1		OK		Tshembhani Khosa - 446920	Train
10011	A	Put the door authorization switch 50S7 to DRIVER mode		OK		Tshembhani Khosa - 446920	Train
10012	A	Press the AUTH LEFT button 50S5		OK		Tshembhani Khosa - 446920	Train
10013	R	Door AUTH LEFT not possible, Lamp 50S5 is OFF		OK		Tshembhani Khosa - 446920	Train
10014	A	Press the OPEN LEFT button 50S1		OK		Tshembhani Khosa - 446920	Train
10015	R	OPEN LEFT door not possible, Lamp 50S1 is OFF		OK		Tshembhani Khosa - 446920	Train
10016	A	Press the AUTH RIGHT button 50S6		OK		Tshembhani Khosa - 446920	Train
10017	R	Door AUTH RIGHT not possible, Lamp 50S6 is OFF		OK		Tshembhani Khosa - 446920	Train

10018	A	Press the OPEN RIGHT button 50S2		OK		Tshembhani Khosa - 446920	Train
10019	R	OPEN RIGHT door not possible, Lamp 50S2 is OFF		OK		Tshembhani Khosa - 446920	Train
10020	I	Door authorization with active cab		OK		Tshembhani Khosa - 446920	Train
10021	A	Activate cab on TC1		OK		Tshembhani Khosa - 446920	Train
10022	R	Read Defined Variable [TT] (MPU1)li_dor_tc1alldoorsclosedr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10023	A	Press and hold the AUTH LEFT button 50S5		OK		Tshembhani Khosa - 446920	Train
10024	R	Read Defined Variable [TT] (MPU1)li_dor_tc1opendoorpbleftr1 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10025	A	Press and hold the OPEN LEFT button 50S1		OK		Tshembhani Khosa - 446920	Train
10026	R	Read Defined Variable [TT] (MPU1)lo_dor_tc1opendoorleft = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10027	R	Read Defined Variable [TT] (MPU1)li_dor_tc1opendoorpbleftr1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10028	R	Check on DDU screen that all left doors are OPEN and in WHITE colour		OK		Tshembhani Khosa - 446920	Train
10029	R	Door safety loop is OPEN, lamp 51H1 is ON		OK		Tshembhani Khosa - 446920	Train
10030	A	Press and hold the CLOSE LEFT button 50S3		OK		Tshembhani Khosa - 446920	Train
10031	R	Read Defined Variable [TT] (MPU1)li_dor_tc1closedoorpbleftr1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10032	R	Read Defined Variable [TT] (MPU1)li_dor_tc1closedoorlineleft = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10033	R	Lamp 51H1 is OFF		OK		Tshembhani Khosa - 446920	Train
10034	R	Check on the DDU screen that all left doors are closed and in blue colour		OK		Tshembhani Khosa - 446920	Train
10035	A	Press and hold the AUTH RIGHT button 50S6		OK		Tshembhani Khosa - 446920	Train

10036	R	Lamp 50S6 is ON		OK		Tshembhani Khosa - 446920	Train
10037	R	Read Defined Variable [TT] (MPU1)li_dor_tc1authdoorpbright = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10038	R	Read Defined Variable [TT] (MPU1)li_dor_tc1opendoorpbrightr1 = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10039	A	Press and hold the OPEN RIGHT button 50S2		OK		Tshembhani Khosa - 446920	Train
10040	R	Read Defined Variable [TT] (MPU1)lo_dor_tc1opendoorright = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10041	R	Read Defined Variable [TT] (MPU1)lo_dor_tc1opendoorright = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10042	R	Check on DDU screen that all right doors are OPEN		OK		Tshembhani Khosa - 446920	Train
10043	R	Door safety loop is OPEN, lamp 51H1 is ON		OK		Tshembhani Khosa - 446920	Train
10044	A	Press and hold the button 50S4 to close all right doors		OK		Tshembhani Khosa - 446920	Train
10045	R	Read Defined Variable [TT] (MPU1)li_dor_tc1closedoorpbrightr1 = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10046	R	Read Defined Variable [TT] (MPU1)li_dor_tc1closedoorlineright = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10047	R	Lamp 51H1 is OFF		OK		Tshembhani Khosa - 446920	Train
10048	R	Check on the DDU screen that all right doors are closed and in blue colour		OK		Walter Sigudla - 486333	Train
10049	A	Press the AUTH LEFT button 50S5		OK		Walter Sigudla - 486333	Train
10050	A	Press the OPEN LEFT button 50S1		OK		Walter Sigudla - 486333	Train
10051	A	Press the AUTH RIGHT button 50S6		OK		Tshembhani Khosa - 446920	Train
10052	A	Press the OPEN RIGHT button 50S2		OK		Tshembhani Khosa - 446920	Train
10053	R	Take a walk to TC2 on the train, verify that all doors have the light 50H20 lighting in GREEN colour to indicate door		OK		Walter Sigudla - 486333	Train

		is open					
10054	A	Press the CLOSE LEFT button 50S3		OK		Walter Sigudla - 486333	Train
10055	A	Press the CLOSE RIGHT button 50S4		OK		Walter Sigudla - 486333	Train
10056	R	All doors are closed on the DDU screen		OK		Walter Sigudla - 486333	Train
10057	I	Train speed more than 3km/h TC1		OK		Walter Sigudla - 486333	Train
10058	A	Open 61Q1 to switch OFF the OTDR		OK		Walter Sigudla - 486333	Train
10059	A	Press the AUTH LEFT button 50S5		OK		Walter Sigudla - 486333	Train
10060	A	Press the OPEN LEFT button 50S1		OK		Walter Sigudla - 486333	Train
10061	A	Press the AUTH RIGHT button 50S6		OK		Walter Sigudla - 486333	Train
10062	A	Press the OPEN RIGHT button 50S2		OK		Walter Sigudla - 486333	Train
10063	A	Force [TT] (BCU1)LO_SPEED_THRSLD1 = 0.0		OK		Walter Sigudla - 486333	Train
10064	A	Force [TT] (BCU2)LO_SPEED_THRSLD1 = 0.0		OK		Walter Sigudla - 486333	Train
10065	R	All left doors are closed		OK		Walter Sigudla - 486333	Train
10066	R	All right doors are closed		OK		Walter Sigudla - 486333	Train
10067	A	Press the AUTH LEFT button 50S5		OK		Walter Sigudla - 486333	Train
10068	A	Press the OPEN LEFT button 50S1		OK		Walter Sigudla - 486333	Train
10069	A	Press the AUTH RIGHT button 50S6		OK		Walter Sigudla - 486333	Train
10070	A	Press the OPEN RIGHT button 50S2		OK		Walter Sigudla - 486333	Train
10071	R	All doors remain closed		OK		Walter Sigudla - 486333	Train
10072	A	Release [TT] (BCU1)LO_SPEED_THRSLD1		OK		Walter Sigudla - 486333	Train
10073	A	Release [TT] (BCU2)LO_SPEED_THRSLD1		OK		Walter Sigudla - 486333	Train
10074	I	Doors functional Test TC2 Cab		OK		Walter Sigudla - 486333	Train

10075	I	Door authorization not possible in non-active cab		OK		Walter Sigudla - 486333	Train
10076	A	Press the AUTH LEFT button 50S5		OK		Walter Sigudla - 486333	Train
10077	R	Door AUTH LEFT not possible, Lamp 50S5 is OFF		OK		Walter Sigudla - 486333	Train
10078	A	Press the OPEN LEFT button 50S1		OK		Walter Sigudla - 486333	Train
10079	R	OPEN LEFT door is not possible, Lamp 50S1 is OFF		OK		Walter Sigudla - 486333	Train
10080	A	Press the AUTH RIGHT button 50S6		OK		Walter Sigudla - 486333	Train
10081	R	Door AUTH RIGHT not possible, Lamp 50S6 is OFF		OK		Walter Sigudla - 486333	Train
10082	A	Press the OPEN RIGHT button 50S2		OK		Walter Sigudla - 486333	Train
10083	R	OPEN RIGHT door not possible, Lamp 50S2 is OFF		OK		Walter Sigudla - 486333	Train
10084	I	Door authorization with active cab		OK		Walter Sigudla - 486333	Train
10085	A	Activate cab on TC2		OK		Walter Sigudla - 486333	Train
10086	A	Set the door authorization switch 50S7 to DRIVER mode in LV1		OK		Walter Sigudla - 486333	Train
10087	R	Read Defined Variable [TT] (MPU1)li_dor_tc2alldoorsclosedr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10088	A	Press and hold the AUTH LEFT button 50S5		OK		Walter Sigudla - 486333	Train
10089	R	Read Defined Variable [TT] (MPU1)li_dor_tc2authdoorpbleft = 1.0		OK	1	Walter Sigudla - 486333	Train
10090	R	Read Defined Variable [TT] (MPU1)li_dor_tc2opendoorpbleftr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10091	A	Press and hold the OPEN LEFT button 50S1		OK		Walter Sigudla - 486333	Train
10092	R	Read Defined Variable [TT] (MPU1)lo_dor_tc2opendoorleft = 1.0		OK	1	Walter Sigudla - 486333	Train
10093	R	Read Defined Variable [TT] (MPU1)li_dor_tc2opendoorpbleftr1 = 1.0		OK	1	Walter Sigudla - 486333	Train

10094	R	Check on DDU screen that all left doors are OPEN and in WHITE colour		OK		Walter Sigudla - 486333	Train
10095	I	Door safety loop is OPEN, lamp 51H1 is ON		OK		Walter Sigudla - 486333	Train
10096	A	Press and hold the CLOSE LEFT button 50S3		OK		Walter Sigudla - 486333	Train
10097	R	Read Defined Variable [TT] (MPU1)li_dor_tc2closedoorlineleft = 1.0		OK	1	Walter Sigudla - 486333	Train
10098	R	Read Defined Variable [TT] (MPU1)li_dor_tc2closedoorpbleftr1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10099	R	Lamp 51H1 is OFF		OK		Walter Sigudla - 486333	Train
10100	R	Check on the DDU screen that all left doors are closed and in blue colour		OK		Walter Sigudla - 486333	Train
10101	A	Press and hold and hold the AUTH RIGHT button 50S6		OK		Walter Sigudla - 486333	Train
10102	R	Read Defined Variable [TT] (MPU1)li_dor_tc2authdoorpbright = 1.0		OK	1	Walter Sigudla - 486333	Train
10103	R	Read Defined Variable [TT] (MPU1)li_dor_tc2opendoorpbrightr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10104	A	Press and hold the OPEN RIGHT button 50S2		OK		Walter Sigudla - 486333	Train
10105	R	Read Defined Variable [TT] (MPU1)li_dor_tc2opendoorpbrightr1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10106	R	Check on DDU screen that all right doors are OPEN		OK		Walter Sigudla - 486333	Train
10107	I	Door safety loop is OPEN, lamp 51H1 is ON		OK		Walter Sigudla - 486333	Train
10108	R	Press the CLOSE RIGHT button 50S4		OK		Walter Sigudla - 486333	Train
10109	R	Read Defined Variable [TT] (MPU1)li_dor_tc2closedoorlineleft = 1.0		OK	1	Walter Sigudla - 486333	Train
10110	R	Read Defined Variable [TT] (MPU1)li_dor_tc2closedoorpbrightr1 = 1.0		OK	1	Walter Sigudla - 486333	Train

10111	R	Lamp 51H1 is OFF		OK		Walter Sigudla - 486333	Train
10112	R	Check on the DDU screen that all right doors are closed and in blue colour		OK		Walter Sigudla - 486333	Train
10113	A	Press the AUTH LEFT button 50S5		OK		Walter Sigudla - 486333	Train
10114	A	Press the OPEN LEFT button 50S1		OK		Walter Sigudla - 486333	Train
10115	A	Press the AUTH RIGHT button 50S6		OK		Walter Sigudla - 486333	Train
10116	A	Press the OPEN RIGHT button 50S2		OK		Walter Sigudla - 486333	Train
10117	R	Take a walk to TC1 on the train, verify that all doors have the light 50H20 lighting in GREEN colour to indicate door is open		OK		Walter Sigudla - 486333	Train
10118	A	Press the CLOSE LEFT button 50S3		OK		Walter Sigudla - 486333	Train
10119	A	Press the CLOSE RIGHT button 50S4		OK		Walter Sigudla - 486333	Train
10120	R	All doors are closed on the DDU screen		OK		Walter Sigudla - 486333	Train
10121	I	Train speed more than 3km/h TC2		OK		Walter Sigudla - 486333	Train
10122	A	Open 61Q1 to switch OFF the OTDR		OK		Walter Sigudla - 486333	Train
10123	A	Press the AUTH LEFT button 50S5		OK		Walter Sigudla - 486333	Train
10124	A	Press the OPEN LEFT button 50S1		OK		Walter Sigudla - 486333	Train
10125	A	Press the AUTH RIGHT button 50S6		OK		Walter Sigudla - 486333	Train
10126	A	Press the OPEN RIGHT button 50S2		OK		Walter Sigudla - 486333	Train
10127	A	Force [TT] (BCU1)LO_SPEED_THRSLD1 = 0.0		OK		Walter Sigudla - 486333	Train
10128	A	Force [TT] (BCU2)LO_SPEED_THRSLD1 = 0.0		OK		Walter Sigudla - 486333	Train
10129	R	All left doors are closed		OK		Walter Sigudla - 486333	Train
10130	R	All right doors are closed		OK		Walter Sigudla - 486333	Train
10131	A	Press the AUTH LEFT button 50S5		OK		Walter Sigudla - 486333	Train

10132	A	Press the OPEN LEFT button 50S1		OK		Walter Sigudla - 486333	Train
10133	A	Press the AUTH RIGHT button 50S6		OK		Walter Sigudla - 486333	Train
10134	A	Press the OPEN RIGHT button 50S2		OK		Walter Sigudla - 486333	Train
10135	R	All doors remain closed		OK		Walter Sigudla - 486333	Train
10136	A	Release [TT] (BCU1)LO_SPEED_THRSLD1		OK		Walter Sigudla - 486333	Train
10137	A	Release [TT] (BCU2)LO_SPEED_THRSLD1		OK		Walter Sigudla - 486333	Train
10138	A	Close 61Q1 circuit breaker		OK		Walter Sigudla - 486333	Train
10139	I	Door Obstacle Detection		OK		Walter Sigudla - 486333	Train
10140	I	This test is to verify if the CCTV footage will display on the DDU when an obstacle is detected at any door		OK		Walter Sigudla - 486333	Train
10141	A	Press the DOOR AUTH left button 50S5		OK		Walter Sigudla - 486333	Train
10142	A	Press the button 50S1 to open left doors		OK		Walter Sigudla - 486333	Train
10143	A	Place an obstacle at the centre of any of the open doors		OK		Walter Sigudla - 486333	Train
10144	A	Close the left doors		OK		Walter Sigudla - 486333	Train
10145	I	The door with an obstacle will attempt to close 3 times		OK		Walter Sigudla - 486333	Train
10146	R	The door with an obstacle appears in white colour on the DDU screen		OK		Walter Sigudla - 486333	Train
10147	A	Remove the obstacle		OK		Walter Sigudla - 486333	Train
10148	A	Open and close left doors		OK		Walter Sigudla - 486333	Train
10149	R	The door which had the obstacle appears closed on the DDU and it's in blue colour		OK		Walter Sigudla - 486333	Train
10150	I	Door Manual Opening		OK		Walter Sigudla - 486333	Train
10151	A	All doors should be closed including the door covers in each saloon		OK		Walter Sigudla - 486333	Train

10152	I	TC1		OK		Walter Sigudla - 486333	Train
10153	A	Put the switch 50S7 in DRIVER mode		OK		Walter Sigudla - 486333	Train
10154	A	Try to manually open ALL TC1 DOORS		OK		Walter Sigudla - 486333	Train
10155	R	It is not possible to manually open any of the doors		OK		Walter Sigudla - 486333	Train
10156	A	Pull the PEA using the Force gauge while measuring the effort of the PEA		OK		Walter Sigudla - 486333	Train
10157	R	DOOR1 PEA effort Result Max : x <= 120 (N)		OK	119	Walter Sigudla - 486333	Train
10158	R	DOOR2 PEA effort Result Max : x <= 120 (N)		OK	118	Walter Sigudla - 486333	Train
10159	R	DOOR3 PEA effort Result Max : x <= 120 (N)		OK	119	Walter Sigudla - 486333	Train
10160	R	DOOR4 PEA effort Result Max : x <= 120 (N)		OK	120	Walter Sigudla - 486333	Train
10161	R	DOOR5 PEA effort Result Max : x <= 120 (N)		OK	119	Walter Sigudla - 486333	Train
10162	R	DOOR6 PEA effort Result Max : x <= 120 (N)		OK	118	Walter Sigudla - 486333	Train
10163	A	Manually open the doors		OK		Walter Sigudla - 486333	Train
10164	R	Doors opens freely		OK		Walter Sigudla - 486333	Train
10165	A	Press AUTH LEFT BUTTON 50S5		OK		Walter Sigudla - 486333	Train
10166	A	Press AUTH RIGHT BUTTON 50S6		OK		Walter Sigudla - 486333	Train
10167	A	Press the OPEN LEFT button 50S1		OK		Walter Sigudla - 486333	Train
10168	A	Press the OPEN RIGHT button 50S2		OK		Walter Sigudla - 486333	Train
10169	R	Read Defined Variable [TT] (MPU1)lo_dor_tc1opendoorright = 1.0		OK	1	Walter Sigudla - 486333	Train
10170	R	Read Defined Variable [TT] (MPU1)lo_dor_tc1opendoorleft = 1.0		OK	1	Walter Sigudla - 486333	Train
10171	A	Press the CLOSE LEFT button 50S3		OK		Walter Sigudla - 486333	Train
10172	A	Press the CLOSE RIGHT button 50S4		OK		Walter Sigudla - 486333	Train
10173	R	The TC1 doors remains open		OK		Walter Sigudla - 486333	Train

10174	A	Press the button 54S3 to acknowledge PEAs		OK		Walter Sigudla - 486333	Train
10175	A	Reset the PEA using switch 44S6		OK		Walter Sigudla - 486333	Train
10176	A	Press AUTH LEFT BUTTON 50S5		OK		Walter Sigudla - 486333	Train
10177	A	Press AUTH RIGHT BUTTON 50S6		OK		Walter Sigudla - 486333	Train
10178	A	Press the OPEN LEFT button 50S1		OK		Walter Sigudla - 486333	Train
10179	A	Press the OPEN RIGHT button 50S2		OK		Walter Sigudla - 486333	Train
10180	A	Press the CLOSE LEFT button 50S3		OK		Walter Sigudla - 486333	Train
10181	A	Press the CLOSE RIGHT button 50S4		OK		Walter Sigudla - 486333	Train
10182	R	The TC1 doors closes		OK		Walter Sigudla - 486333	Train
10183	A	Activate the lockout device on ALL TC1 Doors		OK		Walter Sigudla - 486333	Train
10184	R	Doors of TC1 appear as OUT OF SERVICE on DDU screen		OK		Walter Sigudla - 486333	Train
10185	A	Try to manually open the doors		OK		Walter Sigudla - 486333	Train
10186	R	It is not possible to open any of the doors		OK		Walter Sigudla - 486333	Train
10187	A	Pull the PEAs		OK		Walter Sigudla - 486333	Train
10188	A	Try to manually open the doors		OK		Walter Sigudla - 486333	Train
10189	R	It is not possible to open any of the doors		OK		Walter Sigudla - 486333	Train
10190	A	Press AUTH LEFT BUTTON 50S5		OK		Walter Sigudla - 486333	Train
10191	A	Press AUTH RIGHT BUTTON 50S6		OK		Walter Sigudla - 486333	Train
10192	A	Press the OPEN LEFT button 50S1		OK		Walter Sigudla - 486333	Train
10193	A	Press the OPEN RIGHT button 50S2		OK		Walter Sigudla - 486333	Train
10194	R	All Train doors are open except for TC1 doors		OK		Walter Sigudla - 486333	Train
10195	A	Press the button 54S3 to acknowledge PEA		OK		Walter Sigudla - 486333	Train

10196	A	Release the lockout devices		OK		Walter Sigudla - 486333	Train
10197	A	Reset the PEAs using the switch 44S6		OK		Walter Sigudla - 486333	Train
10198	A	Press the CLOSE LEFT button 50S3		OK		Walter Sigudla - 486333	Train
10199	A	Press the CLOSE RIGHT button 50S4		OK		Walter Sigudla - 486333	Train
10200	R	Doors appears as Closed on the DDU screen		OK		Walter Sigudla - 486333	Train
10201	R	Read Defined Variable [TT] (MPU1)li_dor_tc1alldoorsclosedr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10202	I	M4 car		OK		Walter Sigudla - 486333	Train
10203	A	Try to manually open ALL M4 DOORS		OK		Walter Sigudla - 486333	Train
10204	R	It is not possible to manually open any of the doors		OK		Walter Sigudla - 486333	Train
10205	A	Pull the PEA using the Force gauge while measuring the effort of the PEA		OK		Walter Sigudla - 486333	Train
10206	R	DOOR1 PEA effort Result Max : x <= 120 (N)		OK	119	Walter Sigudla - 486333	Train
10207	R	DOOR2 PEA effort Result Max : x <= 120 (N)		OK	119	Walter Sigudla - 486333	Train
10208	R	DOOR3 PEA effort Result Max : x <= 120 (N)		OK	118	Walter Sigudla - 486333	Train
10209	R	DOOR4 PEA effort Result Max : x <= 120 (N)		OK	119	Walter Sigudla - 486333	Train
10210	R	DOOR5 PEA effort Result Max : x <= 120 (N)		OK	118	Walter Sigudla - 486333	Train
10211	R	DOOR6 PEA effort Result Max : x <= 120 (N)		OK	119	Walter Sigudla - 486333	Train
10212	A	Manually open the doors		OK		Walter Sigudla - 486333	Train
10213	R	Doors opens freely		OK		Walter Sigudla - 486333	Train
10214	A	Press AUTH LEFT BUTTON 50S5		OK		Walter Sigudla - 486333	Train
10215	A	Press AUTH RIGHT BUTTON 50S6		OK		Walter Sigudla - 486333	Train
10216	A	Press the OPEN LEFT button 50S1		OK		Walter Sigudla - 486333	Train
10217	A	Press the OPEN RIGHT button 50S2		OK		Walter Sigudla - 486333	Train

10218	R	Read Defined Variable [TT] (MPU1)lo_dor_m4opendoorright = 1.0		OK	1	Walter Sigudla - 486333	Train
10219	R	Read Defined Variable [TT] (MPU1)lo_dor_m4opendoorleft = 1.0		OK	1	Walter Sigudla - 486333	Train
10220	A	Press the CLOSE LEFT button 50S3		OK		Walter Sigudla - 486333	Train
10221	A	Press the CLOSE RIGHT button 50S4		OK		Walter Sigudla - 486333	Train
10222	R	The M4 doors remains open		OK		Walter Sigudla - 486333	Train
10223	A	Press the button 54S3 to acknowledge PEAs		OK		Walter Sigudla - 486333	Train
10224	A	Reset the PEA using switch 44S6		OK		Walter Sigudla - 486333	Train
10225	A	Press AUTH LEFT BUTTON 50S5		OK		Walter Sigudla - 486333	Train
10226	A	Press AUTH RIGHT BUTTON 50S6		OK		Walter Sigudla - 486333	Train
10227	A	Press the OPEN LEFT button 50S1		OK		Walter Sigudla - 486333	Train
10228	A	Press the OPEN RIGHT button 50S2		OK		Walter Sigudla - 486333	Train
10229	A	Press the CLOSE LEFT button 50S3		OK		Walter Sigudla - 486333	Train
10230	A	Press the CLOSE RIGHT button 50S4		OK		Walter Sigudla - 486333	Train
10231	R	The M4 doors closes		OK		Walter Sigudla - 486333	Train
10232	A	Activate the lockout device on ALL M4 Doors		OK		Walter Sigudla - 486333	Train
10233	R	Doors of M4 appear as OUT OF SERVICE on DDU screen		OK		Walter Sigudla - 486333	Train
10234	A	Try to manually open the doors		OK		Walter Sigudla - 486333	Train
10235	R	It is not possible to open any of the doors		OK		Walter Sigudla - 486333	Train
10236	A	Pull the PEAs		OK		Walter Sigudla - 486333	Train
10237	A	Try to manually open the doors		OK		Walter Sigudla - 486333	Train
10238	R	It is not possible to open any of the doors		OK		Walter Sigudla - 486333	Train
10239	A	Press AUTH LEFT BUTTON 50S5		OK		Walter Sigudla - 486333	Train

10240	A	Press AUTH RIGHT BUTTON 50S6		OK		Walter Sigudla - 486333	Train
10241	A	Press the OPEN LEFT button 50S1		OK		Walter Sigudla - 486333	Train
10242	A	Press the OPEN RIGHT button 50S2		OK		Walter Sigudla - 486333	Train
10243	R	All Train doors are open except for M4 doors		OK		Walter Sigudla - 486333	Train
10244	A	Press the button 54S3 to acknowledge PEA		OK		Walter Sigudla - 486333	Train
10245	A	Release the lockout devices		OK		Walter Sigudla - 486333	Train
10246	A	Reset the PEAs using the switch 44S6		OK		Walter Sigudla - 486333	Train
10247	A	Press the CLOSE LEFT button 50S3		OK		Walter Sigudla - 486333	Train
10248	A	Press the CLOSE RIGHT button 50S4		OK		Walter Sigudla - 486333	Train
10249	R	Doors appears as Closed on the DDU screen		OK		Walter Sigudla - 486333	Train
10250	R	Read Defined Variable [TT] (MPU1)li_dor_tc1alldoorsclosedr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10251	I	M1 car		OK		Walter Sigudla - 486333	Train
10252	A	Try to manually open ALL M1 DOORS		OK		Walter Sigudla - 486333	Train
10253	R	It is not possible to manually open any of the doors		OK		Walter Sigudla - 486333	Train
10254	A	Pull the PEA using the Force gauge while measuring the effort of the PEA		OK		Walter Sigudla - 486333	Train
10255	R	DOOR1 PEA effort Result Max : x <= 120 (N)		OK	120	Walter Sigudla - 486333	Train
10256	R	DOOR2 PEA effort Result Max : x <= 120 (N)		OK	119	Walter Sigudla - 486333	Train
10257	R	DOOR3 PEA effort Result Max : x <= 120 (N)		OK	119	Walter Sigudla - 486333	Train
10258	R	DOOR4 PEA effort Result Max : x <= 120 (N)		OK	120	Walter Sigudla - 486333	Train
10259	R	DOOR5 PEA effort Result Max : x <= 120 (N)		OK	119	Walter Sigudla - 486333	Train
10260	R	DOOR6 PEA effort Result Max : x <= 120 (N)		OK	120	Walter Sigudla - 486333	Train
10261	A	Manually open the doors		OK		Walter Sigudla - 486333	Train

10262	R	Doors opens freely		OK		Walter Sigudla - 486333	Train
10263	A	Press AUTH LEFT BUTTON 50S5		OK		Walter Sigudla - 486333	Train
10264	A	Press AUTH RIGHT BUTTON 50S6		OK		Walter Sigudla - 486333	Train
10265	A	Press the OPEN LEFT button 50S1		OK		Walter Sigudla - 486333	Train
10266	A	Press the OPEN RIGHT button 50S2		OK		Walter Sigudla - 486333	Train
10267	R	Read Defined Variable [TT] (MPU1)lo_dor_m1opendoorright = 1.0		OK	1	Walter Sigudla - 486333	Train
10268	R	Read Defined Variable [TT] (MPU1)lo_dor_m2opendoorleft = 1.0		OK	1	Walter Sigudla - 486333	Train
10269	A	Press the CLOSE LEFT button 50S3		OK		Walter Sigudla - 486333	Train
10270	A	Press the CLOSE RIGHT button 50S4		OK		Walter Sigudla - 486333	Train
10271	R	The M1 doors remains open		OK		Walter Sigudla - 486333	Train
10272	A	Press the button 54S3 to acknowledge PEAs		OK		Walter Sigudla - 486333	Train
10273	A	Reset the PEA using switch 44S6		OK		Walter Sigudla - 486333	Train
10274	A	Press AUTH LEFT BUTTON 50S5		OK		Walter Sigudla - 486333	Train
10275	A	Press AUTH RIGHT BUTTON 50S6		OK		Walter Sigudla - 486333	Train
10276	A	Press the OPEN LEFT button 50S1		OK		Walter Sigudla - 486333	Train
10277	A	Press the OPEN RIGHT button 50S2		OK		Walter Sigudla - 486333	Train
10278	A	Press the CLOSE LEFT button 50S3		OK		Walter Sigudla - 486333	Train
10279	A	Press the CLOSE RIGHT button 50S4		OK		Walter Sigudla - 486333	Train
10280	R	The M1 doors closes		OK		Walter Sigudla - 486333	Train
10281	A	Activate the lockout device on ALL M1 Doors		OK		Walter Sigudla - 486333	Train
10282	R	Doors of M1 appear as OUT OF SERVICE on DDU screen		OK		Walter Sigudla - 486333	Train
10283	A	Try to manually open the doors		OK		Walter Sigudla - 486333	Train

10284	R	It is not possible to open any of the doors		OK		Walter Sigudla - 486333	Train
10285	A	Pull the PEAs		OK		Walter Sigudla - 486333	Train
10286	A	Try to manually open the doors		OK		Walter Sigudla - 486333	Train
10287	R	It is not possible to open any of the doors		OK		Walter Sigudla - 486333	Train
10288	A	Press AUTH LEFT BUTTON 50S5		OK		Walter Sigudla - 486333	Train
10289	A	Press AUTH RIGHT BUTTON 50S6		OK		Walter Sigudla - 486333	Train
10290	A	Press the OPEN LEFT button 50S1		OK		Walter Sigudla - 486333	Train
10291	A	Press the OPEN RIGHT button 50S2		OK		Walter Sigudla - 486333	Train
10292	R	All Train doors are open except for M1 doors		OK		Walter Sigudla - 486333	Train
10293	A	Press the button 54S3 to acknowledge PEA		OK		Walter Sigudla - 486333	Train
10294	A	Release the lockout devices		OK		Walter Sigudla - 486333	Train
10295	A	Reset the PEAs using the switch 44S6		OK		Walter Sigudla - 486333	Train
10296	A	Press the CLOSE LEFT button 50S3		OK		Walter Sigudla - 486333	Train
10297	A	Press the CLOSE RIGHT button 50S4		OK		Walter Sigudla - 486333	Train
10298	R	Doors appears as Closed on the DDU screen		OK		Walter Sigudla - 486333	Train
10299	R	Read Defined Variable [TT] (MPU1)li_dor_tc1alldoorsclosedr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10300	I	M2 car		OK		Walter Sigudla - 486333	Train
10301	A	Try to manually open ALL M2 DOORS		OK		Walter Sigudla - 486333	Train
10302	R	It is not possible to manually open any of the doors		OK		Walter Sigudla - 486333	Train
10303	A	Pull the PEA using the Force gauge while measuring the effort of the PEA		OK		Walter Sigudla - 486333	Train
10304	R	DOOR1 PEA effort Result Max : x <= 120 (N)		OK	119	Walter Sigudla - 486333	Train

10305	R	DOOR2 PEA effort Result Max : x <= 120 (N)		OK	119	Walter Sigudla - 486333	Train
10306	R	DOOR3 PEA effort Result Max : x <= 120 (N)		OK	120	Walter Sigudla - 486333	Train
10307	R	DOOR4 PEA effort Result Max : x <= 120 (N)		OK	120	Walter Sigudla - 486333	Train
10308	R	DOOR5 PEA effort Result Max : x <= 120 (N)		OK	119	Walter Sigudla - 486333	Train
10309	R	DOOR6 PEA effort Result Max : x <= 120 (N)		OK	120	Walter Sigudla - 486333	Train
10310	A	Manually open the doors		OK		Walter Sigudla - 486333	Train
10311	R	Doors opens freely		OK		Walter Sigudla - 486333	Train
10312	A	Press AUTH LEFT BUTTON 50S5		OK		Walter Sigudla - 486333	Train
10313	A	Press AUTH RIGHT BUTTON 50S6		OK		Walter Sigudla - 486333	Train
10314	A	Press the OPEN LEFT button 50S1		OK		Walter Sigudla - 486333	Train
10315	A	Press the OPEN RIGHT button 50S2		OK		Walter Sigudla - 486333	Train
10316	R	Read Defined Variable [TT] (MPU1)lo_dor_m2opendoorright = 1.0		OK	1	Walter Sigudla - 486333	Train
10317	R	Read Defined Variable [TT] (MPU1)lo_dor_m2opendoorleft = 1.0		OK	1	Walter Sigudla - 486333	Train
10318	A	Press the CLOSE LEFT button 50S3		OK		Walter Sigudla - 486333	Train
10319	A	Press the CLOSE RIGHT button 50S4		OK		Walter Sigudla - 486333	Train
10320	R	The M2 doors remains open		OK		Walter Sigudla - 486333	Train
10321	A	Press the button 54S3 to acknowledge PEAs		OK		Walter Sigudla - 486333	Train
10322	A	Reset the PEA using switch 44S6		OK		Walter Sigudla - 486333	Train
10323	A	Press AUTH LEFT BUTTON 50S5		OK		Walter Sigudla - 486333	Train
10324	A	Press AUTH RIGHT BUTTON 50S6		OK		Walter Sigudla - 486333	Train
10325	A	Press the OPEN LEFT button 50S1		OK		Walter Sigudla - 486333	Train
10326	A	Press the OPEN RIGHT button 50S2		OK		Walter Sigudla - 486333	Train
10327	A	Press the CLOSE LEFT button 50S3		OK		Walter Sigudla - 486333	Train

10328	A	Press the CLOSE RIGHT button 50S4		OK		Walter Sigudla - 486333	Train
10329	R	The M2 doors closes		OK		Walter Sigudla - 486333	Train
10330	A	Activate the lockout device on ALL M2 Doors		OK		Walter Sigudla - 486333	Train
10331	R	Doors of M2 appear as OUT OF SERVICE on DDU screen		OK		Walter Sigudla - 486333	Train
10332	A	Try to manually open the doors		OK		Walter Sigudla - 486333	Train
10333	R	It is not possible to open any of the doors		OK		Walter Sigudla - 486333	Train
10334	A	Pull the PEAs		OK		Walter Sigudla - 486333	Train
10335	A	Try to manually open the doors		OK		Walter Sigudla - 486333	Train
10336	R	It is not possible to open any of the doors		OK		Walter Sigudla - 486333	Train
10337	A	Press AUTH LEFT BUTTON 50S5		OK		Walter Sigudla - 486333	Train
10338	A	Press AUTH RIGHT BUTTON 50S6		OK		Walter Sigudla - 486333	Train
10339	A	Press the OPEN LEFT button 50S1		OK		Walter Sigudla - 486333	Train
10340	A	Press the OPEN RIGHT button 50S2		OK		Walter Sigudla - 486333	Train
10341	R	All Train doors are open except for M2 doors		OK		Walter Sigudla - 486333	Train
10342	A	Press the button 54S3 to acknowledge PEA		OK		Walter Sigudla - 486333	Train
10343	A	Release the lockout devices		OK		Walter Sigudla - 486333	Train
10344	A	Reset the PEAs using the switch 44S6		OK		Walter Sigudla - 486333	Train
10345	A	Press the CLOSE LEFT button 50S3		OK		Walter Sigudla - 486333	Train
10346	A	Press the CLOSE RIGHT button 50S4		OK		Walter Sigudla - 486333	Train
10347	R	Doors appears as Closed on the DDU screen		OK		Walter Sigudla - 486333	Train
10348	R	Read Defined Variable [TT] (MPU1)li_dor_tc1alldoorsclosedr1 = 0.0		OK	0	Walter Sigudla - 486333	Train

10349	I	M3 car		OK		Walter Sigudla - 486333	Train
10350	A	Try to manually open ALL M3 DOORS		OK		Walter Sigudla - 486333	Train
10351	R	It is not possible to manually open any of the doors		OK		Walter Sigudla - 486333	Train
10352	A	Pull the PEA using the Force gauge while measuring the effort of the PEA		OK		Walter Sigudla - 486333	Train
10353	R	DOOR1 PEA effort Result Max : x <= 120 (N)		OK	120	Walter Sigudla - 486333	Train
10354	R	DOOR2 PEA effort Result Max : x <= 120 (N)		OK	120	Walter Sigudla - 486333	Train
10355	R	DOOR3 PEA effort Result Max : x <= 120 (N)		OK	119	Walter Sigudla - 486333	Train
10356	R	DOOR4 PEA effort Result Max : x <= 120 (N)		OK	119	Walter Sigudla - 486333	Train
10357	R	DOOR5 PEA effort Result Max : x <= 120 (N)		OK	119	Walter Sigudla - 486333	Train
10358	R	DOOR6 PEA effort Result Max : x <= 120 (N)		OK	119	Walter Sigudla - 486333	Train
10359	A	Manually open the doors		OK		Walter Sigudla - 486333	Train
10360	R	Doors opens freely		OK		Walter Sigudla - 486333	Train
10361	A	Press AUTH LEFT BUTTON 50S5		OK		Walter Sigudla - 486333	Train
10362	A	Press AUTH RIGHT BUTTON 50S6		OK		Walter Sigudla - 486333	Train
10363	A	Press the OPEN LEFT button 50S1		OK		Walter Sigudla - 486333	Train
10364	A	Press the OPEN RIGHT button 50S2		OK		Walter Sigudla - 486333	Train
10365	R	Read Defined Variable [TT] (MPU1)lo_dor_m3opendoorright = 1.0		OK	1	Walter Sigudla - 486333	Train
10366	R	Read Defined Variable [TT] (MPU1)lo_dor_m3opendoorleft = 1.0		OK	1	Walter Sigudla - 486333	Train
10367	A	Press the CLOSE LEFT button 50S3		OK		Walter Sigudla - 486333	Train
10368	A	Press the CLOSE RIGHT button 50S4		OK		Walter Sigudla - 486333	Train
10369	R	The M3 doors remains open		OK		Walter Sigudla - 486333	Train
10370	A	Press the button 54S3 to acknowledge PEAs		OK		Walter Sigudla - 486333	Train

10371	A	Reset the PEA using switch 44S6		OK		Walter Sigudla - 486333	Train
10372	A	Press AUTH LEFT BUTTON 50S5		OK		Walter Sigudla - 486333	Train
10373	A	Press AUTH RIGHT BUTTON 50S6		OK		Walter Sigudla - 486333	Train
10374	A	Press the OPEN LEFT button 50S1		OK		Walter Sigudla - 486333	Train
10375	A	Press the OPEN RIGHT button 50S2		OK		Walter Sigudla - 486333	Train
10376	A	Press the CLOSE LEFT button 50S3		OK		Walter Sigudla - 486333	Train
10377	A	Press the CLOSE RIGHT button 50S4		OK		Walter Sigudla - 486333	Train
10378	R	The M3 doors closes		OK		Walter Sigudla - 486333	Train
10379	A	Activate the lockout device on ALL M3 Doors		OK		Walter Sigudla - 486333	Train
10380	R	Doors of M3 appear as OUT OF SERVICE on DDU screen		OK		Walter Sigudla - 486333	Train
10381	A	Try to manually open the doors		OK		Walter Sigudla - 486333	Train
10382	R	It is not possible to open any of the doors		OK		Walter Sigudla - 486333	Train
10383	A	Pull the PEAs		OK		Walter Sigudla - 486333	Train
10384	A	Try to manually open the doors		OK		Walter Sigudla - 486333	Train
10385	R	It is not possible to open any of the doors		OK		Walter Sigudla - 486333	Train
10386	A	Press AUTH LEFT BUTTON 50S5		OK		Walter Sigudla - 486333	Train
10387	A	Press AUTH RIGHT BUTTON 50S6		OK		Walter Sigudla - 486333	Train
10388	A	Press the OPEN LEFT button 50S1		OK		Walter Sigudla - 486333	Train
10389	A	Press the OPEN RIGHT button 50S2		OK		Walter Sigudla - 486333	Train
10390	R	All Train doors are open except for M3 doors		OK		Walter Sigudla - 486333	Train
10391	A	Press the button 54S3 to acknowledge PEA		OK		Walter Sigudla - 486333	Train
10392	A	Release the lockout devices		OK		Walter Sigudla - 486333	Train

10393	A	Reset the PEAs using the switch 44S6		OK		Walter Sigudla - 486333	Train
10394	A	Press the CLOSE LEFT button 50S3		OK		Walter Sigudla - 486333	Train
10395	A	Press the CLOSE RIGHT button 50S4		OK		Walter Sigudla - 486333	Train
10396	R	Doors appears as Closed on the DDU screen		OK		Walter Sigudla - 486333	Train
10397	R	Read Defined Variable [TT] (MPU1)li_dor_tc1alldoorsclosedr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10398	I	TC2 car		OK		Walter Sigudla - 486333	Train
10399	A	Try to manually open ALL TC2 DOORS		OK		Walter Sigudla - 486333	Train
10400	R	It is not possible to manually open any of the doors		OK		Walter Sigudla - 486333	Train
10401	A	Pull the PEA using the Force gauge while measuring the effort of the PEA		OK		Walter Sigudla - 486333	Train
10402	R	DOOR1 PEA effort Result Max : x <= 120 (N)		OK	120	Walter Sigudla - 486333	Train
10403	R	DOOR2 PEA effort Result Max : x <= 120 (N)		OK	118	Walter Sigudla - 486333	Train
10404	R	DOOR3 PEA effort Result Max : x <= 120 (N)		OK	119	Walter Sigudla - 486333	Train
10405	R	DOOR4 PEA effort Result Max : x <= 120 (N)		OK	119	Walter Sigudla - 486333	Train
10406	R	DOOR5 PEA effort Result Max : x <= 120 (N)		OK	118	Walter Sigudla - 486333	Train
10407	R	DOOR6 PEA effort Result Max : x <= 120 (N)		OK	120	Walter Sigudla - 486333	Train
10408	A	Manually open the doors		OK		Walter Sigudla - 486333	Train
10409	R	Doors opens freely		OK		Walter Sigudla - 486333	Train
10410	A	Press AUTH LEFT BUTTON 50S5		OK		Walter Sigudla - 486333	Train
10411	A	Press AUTH RIGHT BUTTON 50S6		OK		Walter Sigudla - 486333	Train
10412	A	Press the OPEN LEFT button 50S1		OK		Walter Sigudla - 486333	Train
10413	A	Press the OPEN RIGHT button 50S2		OK		Walter Sigudla - 486333	Train
10414	R	Read Defined Variable [TT] (MPU1)lo_dor_tc2opendoorright = 1.0		OK	1	Walter Sigudla - 486333	Train

10415	R	Read Defined Variable [TT] (MPU1)Io_dor_tc2opendoorleft = 1.0		OK	1	Walter Sigudla - 486333	Train
10416	A	Press the CLOSE LEFT button 50S3		OK		Walter Sigudla - 486333	Train
10417	A	Press the CLOSE RIGHT button 50S4		OK		Walter Sigudla - 486333	Train
10418	R	The TC2 doors remains open		OK		Walter Sigudla - 486333	Train
10419	A	Press the button 54S3 to acknowledge PEAs		OK		Walter Sigudla - 486333	Train
10420	A	Reset the PEA using switch 44S6		OK		Walter Sigudla - 486333	Train
10421	A	Press AUTH LEFT BUTTON 50S5		OK		Walter Sigudla - 486333	Train
10422	A	Press AUTH RIGHT BUTTON 50S6		OK		Walter Sigudla - 486333	Train
10423	A	Press the OPEN LEFT button 50S1		OK		Walter Sigudla - 486333	Train
10424	A	Press the OPEN RIGHT button 50S2		OK		Walter Sigudla - 486333	Train
10425	A	Press the CLOSE LEFT button 50S3		OK		Walter Sigudla - 486333	Train
10426	A	Press the CLOSE RIGHT button 50S4		OK		Walter Sigudla - 486333	Train
10427	R	The TC2 doors closes		OK		Walter Sigudla - 486333	Train
10428	A	Activate the lockout device on ALL TC2 Doors		OK		Walter Sigudla - 486333	Train
10429	R	Doors of TC2 appear as OUT OF SERVICE on DDU screen		OK		Walter Sigudla - 486333	Train
10430	A	Try to manually open the doors		OK		Walter Sigudla - 486333	Train
10431	R	It is not possible to open any of the doors		OK		Walter Sigudla - 486333	Train
10432	A	Pull the PEAs		OK		Walter Sigudla - 486333	Train
10433	A	Try to manually open the doors		OK		Walter Sigudla - 486333	Train
10434	R	It is not possible to open any of the doors		OK		Walter Sigudla - 486333	Train
10435	A	Press AUTH LEFT BUTTON 50S5		OK		Walter Sigudla - 486333	Train
10436	A	Press AUTH RIGHT BUTTON 50S6		OK		Walter Sigudla - 486333	Train

10437	A	Press the OPEN LEFT button 50S1		OK		Walter Sigudla - 486333	Train
10438	A	Press the OPEN RIGHT button 50S2		OK		Walter Sigudla - 486333	Train
10439	R	All Train doors are open except for TC2 doors		OK		Walter Sigudla - 486333	Train
10440	A	Press the button 54S3 to acknowledge PEA		OK		Walter Sigudla - 486333	Train
10441	A	Release the lockout devices		OK		Walter Sigudla - 486333	Train
10442	A	Reset the PEAs using the switch 44S6		OK		Alleta Sekgololo - 417407	Train
10443	A	Press the CLOSE LEFT button 50S3		OK		Walter Sigudla - 486333	Train
10444	A	Press the CLOSE RIGHT button 50S4		OK		Walter Sigudla - 486333	Train
10445	R	Doors appears as Closed on the DDU screen		OK		Walter Sigudla - 486333	Train
10446	R	Read Defined Variable [TT] (MPU1)li_dor_tc1alldoorsclosedr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10447	I	Door cycle test		OK		Alleta Sekgololo - 417407	Train
10448	I	This test should be performed at the end of the shift when there is no one who will want to go inside the train and disrupt the test cycle.		OK		Alleta Sekgololo - 417407	Train
10449	A	Check all the doors beep when opening and closing		OK		Alleta Sekgololo - 417407	Train
10450	A	Check door lights are green when open for all doors		OK		Alleta Sekgololo - 417407	Train
10451	A	Check door lights are red when closing from all doors		OK		Alleta Sekgololo - 417407	Train
10452	A	Launch the door cycle test from the DDU		OK		Alleta Sekgololo - 417407	Train
10453	I	At the beginning of the next shift (test should be left to run overnight), all doors should still be able to open and close without any issues		OK		Alleta Sekgololo - 417407	Train
10454	R	Door cycle test is successful		OK		Alleta Sekgololo - 417407	Train
10455	I	End Test		OK		Alleta Sekgololo - 417407	Train

Section 19 – Traction Interlock

19.3 Instructions list

19.3.1 031_TRC-Traction Interlock

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	Traction Interlock SPP=031		OK		Walter Sigudla - 486333	Train
10002	I	Initial Conditions		OK		Walter Sigudla - 486333	Train
10003	I	The direction selector switch 30A1.S2 should be in NEUTRAL position		OK		Walter Sigudla - 486333	Train
10004	I	All doors should be closed		OK		Walter Sigudla - 486333	Train
10005	I	Emergency brake should be applied		OK		Walter Sigudla - 486333	Train
10006	I	PEA override switch should be in NORMAL position		OK		Walter Sigudla - 486333	Train
10007	I	Traction Interlock override switch 31S1 should be in NORMAL position		OK		Walter Sigudla - 486333	Train
10008	I	Backup mode switch 27S1 should be in NORMAL position		OK		Walter Sigudla - 486333	Train
10009	I	Start of Test		OK		Walter Sigudla - 486333	Train
10010	I	Traction Interlock TC1		OK		Walter Sigudla - 486333	Train
10011	A	Active cab on TC1		OK		Walter Sigudla - 486333	Train
10012	A	Force [TT] (MPU1)lo_drc_tc1tractionloopr1 = 1.0		OK		Walter Sigudla - 486333	Train
10013	A	Force [TT] (MPU1)lo_drc_tc1tractionloopr2 = 1.0		OK		Walter Sigudla - 486333	Train
10014	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10015	R	Read Defined Variable [TT] (MPU1)BCU2_TlNotInhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10016	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 0.0		OK	0	Walter Sigudla - 486333	Train

10017	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10018	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10019	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10020	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10021	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr2 = 1.0		OK	1	Walter Sigudla - 486333	Train
10022	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10023	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10024	A	Put the direction selector switch 30A1.S2 should be in FORWARD position		OK		Walter Sigudla - 486333	Train
10025	I	Emergency brake is released		OK		Walter Sigudla - 486333	Train
10026	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10027	R	Read Defined Variable [TT] (MPU1)BCU2_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10028	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10029	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10030	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10031	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10032	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10033	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10034	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train

10035	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10036	A	Put the direction selector switch 30A1.S2 should be in REVERSE position		OK		Walter Sigudla - 486333	Train
10037	I	Emergency brake is released		OK		Walter Sigudla - 486333	Train
10038	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10039	R	Read Defined Variable [TT] (MPU1)BCU2_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10040	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10041	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10042	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10043	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10044	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10045	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10046	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10047	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10048	I	Traction interlock with Doors TC1		OK		Walter Sigudla - 486333	Train
10049	A	Manually open any door		OK		Walter Sigudla - 486333	Train
10050	R	LED 51H1 is "ON" on alarm module		OK		Walter Sigudla - 486333	Train
10051	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10052	R	Read Defined Variable [TT] (MPU1)BCU2_TlNotInhib = 0.0		OK	0	Walter Sigudla - 486333	Train

10053	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10054	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10055	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10056	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10057	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10058	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr2 = 1.0		OK	1	Walter Sigudla - 486333	Train
10059	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10060	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10061	I	Simulate train speed of 5km/h contactor 61K2 is closed		OK		Walter Sigudla - 486333	Train
10062	A	Energize point 41 of terminal block 93XT104_5 with 110V DC		OK		Walter Sigudla - 486333	Train
10063	R	The opened door will automatically close		OK		Walter Sigudla - 486333	Train
10064	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10065	R	Read Defined Variable [TT] (MPU1)BCU2_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10066	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10067	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10068	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10069	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10070	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr1 = 0.0		OK	0	Walter Sigudla - 486333	Train

10071	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10072	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10073	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10074	A	Activate any PEA		OK		Walter Sigudla - 486333	Train
10075	A	After 3 seconds press the button 44S5		OK		Walter Sigudla - 486333	Train
10076	I	Speed is greater than 5km/h therefore all doors will remain closed		OK		Walter Sigudla - 486333	Train
10077	R	Door safety loop is closed, contactor 51K1 and 51K2 are energized		OK		Walter Sigudla - 486333	Train
10078	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10079	R	Read Defined Variable [TT] (MPU1)BCU2_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10080	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10081	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10082	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10083	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10084	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10085	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10086	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10087	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10088	A	Reset PEA using switch 44S6		OK		Walter Sigudla - 486333	Train

10089	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10090	R	Read Defined Variable [TT] (MPU1)BCU2_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10091	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10092	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10093	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10094	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10095	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10096	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10097	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10098	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10099	A	Remove 110V DC from terminal block 93XT104_5 point 41		OK		Walter Sigudla - 486333	Train
10100	A	Activate any PEA		OK		Walter Sigudla - 486333	Train
10101	R	Door is unlocked and can be manually opened		OK		Walter Sigudla - 486333	Train
10102	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10103	R	Read Defined Variable [TT] (MPU1)BCU2_TlNotInhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10104	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10105	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10106	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train

10107	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10108	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10109	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr2 = 1.0		OK	1	Walter Sigudla - 486333	Train
10110	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10111	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10112	A	Reset PEA using switch 44S6		OK		Walter Sigudla - 486333	Train
10113	A	Close the door opened above manually		OK		Walter Sigudla - 486333	Train
10114	R	Door safety loop is closed, contactor 51K1 and 51K2 are energized		OK		Walter Sigudla - 486333	Train
10115	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10116	R	Read Defined Variable [TT] (MPU1)BCU2_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10117	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10118	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10119	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10120	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10121	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10122	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10123	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10124	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train

10125	A	Press the red button 44S1 to make an emergency brake		OK		Walter Sigudla - 486333	Train
10126	R	Contactor of 44K12 and 44K11 are de-energized		OK		Walter Sigudla - 486333	Train
10127	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10128	R	Read Defined Variable [TT] (MPU1)BCU2_TlNotInhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10129	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10130	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10131	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10132	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10133	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10134	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr2 = 1.0		OK	1	Walter Sigudla - 486333	Train
10135	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10136	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10137	A	Release the red button 44S1 for emergency brake		OK		Walter Sigudla - 486333	Train
10138	A	Put the direction selector switch in NEUTRAL position and again in FORWARD position to reset the emergency brake		OK		Walter Sigudla - 486333	Train
10139	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10140	R	Read Defined Variable [TT] (MPU1)BCU2_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10141	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train

10142	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10143	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10144	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10145	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10146	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10147	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10148	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10149	A	Force [TT] (MPU1)lo_drc_tc1tractionloopr1 = 1.0		OK		Walter Sigudla - 486333	Train
10150	A	Force [TT] (MPU1)lo_drc_tc1tractionloopr2 = 0.0		OK		Walter Sigudla - 486333	Train
10151	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10152	R	Read Defined Variable [TT] (MPU1)BCU2_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10153	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10154	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10155	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10156	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10157	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10158	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr2 = 0.0		OK	0	Walter Sigudla - 486333	Train

10159	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10160	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10161	A	Force [TT] (MPU1)lo_drc_tc1tractionloopr1 = 0.0		OK		Walter Sigudla - 486333	Train
10162	A	Force [TT] (MPU1)lo_drc_tc1tractionloopr2 = 1.0		OK		Walter Sigudla - 486333	Train
10163	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10164	R	Read Defined Variable [TT] (MPU1)BCU2_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10165	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10166	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10167	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10168	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10169	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10170	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10171	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10172	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10173	A	Force [TT] (MPU1)lo_drc_tc1tractionloopr1 = 0.0		OK		Walter Sigudla - 486333	Train
10174	A	Force [TT] (MPU1)lo_drc_tc1tractionloopr2 = 0.0		OK		Walter Sigudla - 486333	Train
10175	A	Put the direction selector switch in NEUTRAL Position		OK		Walter Sigudla - 486333	Train

10176	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10177	R	Read Defined Variable [TT] (MPU1)BCU2_TlNotInhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10178	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10179	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10180	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10181	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10182	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10183	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr2 = 1.0		OK	1	Walter Sigudla - 486333	Train
10184	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10185	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10186	A	Release [TT] (MPU1)lo_drc_tc1tractionloopr1		OK		Walter Sigudla - 486333	Train
10187	A	Release [TT] (MPU1)lo_drc_tc1tractionloopr2		OK		Walter Sigudla - 486333	Train
10188	I	Traction Interlock Override TC1		OK		Walter Sigudla - 486333	Train
10189	A	Put the Traction Interlock switch 31S1 in OVERRIDE position		OK		Walter Sigudla - 486333	Train
10190	R	A fault code is generated on the DDU screen to inform the driver that the door interlock has been override		OK		Walter Sigudla - 486333	Train
10191	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10192	R	Read Defined Variable [TT] (MPU1)BCU2_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train

10193	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10194	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10195	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10196	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10197	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10198	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr2 = 1.0		OK	1	Walter Sigudla - 486333	Train
10199	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10200	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider2 = 1.0		OK	1	Walter Sigudla - 486333	Train
10201	A	Put the Traction Interlock switch 31S1 in NORMAL position		OK		Walter Sigudla - 486333	Train
10202	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10203	R	Read Defined Variable [TT] (MPU1)BCU2_TlNotInhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10204	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10205	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10206	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10207	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10208	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10209	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractionauthorr2 = 1.0		OK	1	Walter Sigudla - 486333	Train

10210	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10211	R	Read Defined Variable [TT] (MPU1)li_drc_tc1tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10212	A	Release [TT] (MPU1)lo_drc_tc1tractionloopr1		OK		Walter Sigudla - 486333	Train
10213	A	Release [TT] (MPU1)lo_drc_tc1tractionloopr2		OK		Walter Sigudla - 486333	Train
10214	A	Put the direction selector switch 30A1.S2 should be in NEUTRAL position		OK		Walter Sigudla - 486333	Train
10215	A	Remove active cab on TC1		OK		Walter Sigudla - 486333	Train
10216	I	Traction Interlock TC2		OK		Walter Sigudla - 486333	Train
10217	A	Active Cab on TC2		OK		Walter Sigudla - 486333	Train
10218	I	The direction selector switch 30A1.S2 should be in NEUTRAL position		OK		Walter Sigudla - 486333	Train
10219	I	All doors should be closed		OK		Walter Sigudla - 486333	Train
10220	I	Emergency brake should be applied		OK		Walter Sigudla - 486333	Train
10221	I	PEA override switch should be in NORMAL position		OK		Walter Sigudla - 486333	Train
10222	I	Traction Interlock override switch 31S1 should be in NORMAL position		OK		Walter Sigudla - 486333	Train
10223	I	Backup mode switch 27S1 should be in NORMAL position		OK		Walter Sigudla - 486333	Train
10224	A	Force [TT] (MPU1)lo_drc_tc2tractionloopr1 = 1.0		OK		Walter Sigudla - 486333	Train
10225	A	Force [TT] (MPU1)lo_drc_tc2tractionloopr2 = 1.0		OK		Walter Sigudla - 486333	Train
10226	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10227	R	Read Defined Variable [TT] (MPU1)BCU2_TlNotInhib = 0.0		OK	0	Walter Sigudla - 486333	Train

10228	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10229	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10230	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10231	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10232	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10233	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr2 = 1.0		OK	1	Walter Sigudla - 486333	Train
10234	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10235	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10236	A	Put the direction selector switch 30A1.S2 should be in FORWARD position		OK		Walter Sigudla - 486333	Train
10237	I	Emergency brake is released		OK		Walter Sigudla - 486333	Train
10238	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10239	R	Read Defined Variable [TT] (MPU1)BCU2_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10240	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10241	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10242	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10243	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10244	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10245	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr2 = 0.0		OK	0	Walter Sigudla - 486333	Train

10246	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10247	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10248	A	Put the direction selector switch 30A1.S2 should be in REVERSE position		OK		Walter Sigudla - 486333	Train
10249	I	Emergency brake is released		OK		Walter Sigudla - 486333	Train
10250	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10251	R	Read Defined Variable [TT] (MPU1)BCU2_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10252	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10253	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10254	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10255	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10256	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10257	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10258	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10259	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10260	I	Traction Interlock with Doors TC2		OK		Walter Sigudla - 486333	Train
10261	A	Manually open any door		OK		Walter Sigudla - 486333	Train
10262	R	LED 51H1 is "ON" on alarm module		OK		Walter Sigudla - 486333	Train
10263	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train

10264	R	Read Defined Variable [TT] (MPU1)BCU2_TINotInhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10265	R	Read Defined Variable [TT] (MPU1)TBCU1_TINotInhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10266	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10267	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10268	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10269	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10270	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr2 = 1.0		OK	1	Walter Sigudla - 486333	Train
10271	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10272	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10273	I	Simulate train speed of 5km/h contactor 61K2 is closed		OK		Walter Sigudla - 486333	Train
10274	A	Energize point 41 of terminal block 93XT104_5 with 110V DC		OK		Walter Sigudla - 486333	Train
10275	R	The opened door will automatically close		OK		Walter Sigudla - 486333	Train
10276	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10277	R	Read Defined Variable [TT] (MPU1)BCU2_TINotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10278	R	Read Defined Variable [TT] (MPU1)TBCU1_TINotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10279	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10280	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10281	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train

10282	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10283	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10284	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10285	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10286	A	Activate any PEA		OK		Walter Sigudla - 486333	Train
10287	A	After 3 seconds press the button 44S5		OK		Walter Sigudla - 486333	Train
10288	I	Speed is greater than 5km/h therefore all doors will remain closed		OK		Walter Sigudla - 486333	Train
10289	R	Door safety loop is closed, contactor 51K1 and 51K2 are energized		OK		Walter Sigudla - 486333	Train
10290	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10291	R	Read Defined Variable [TT] (MPU1)BCU2_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10292	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10293	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10294	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10295	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10296	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10297	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10298	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10299	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train

10300	A	Reset PEA using switch 44S6		OK		Walter Sigudla - 486333	Train
10301	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10302	R	Read Defined Variable [TT] (MPU1)BCU2_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10303	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10304	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10305	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10306	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10307	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10308	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10309	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10310	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10311	A	Remove 110V DC from terminal block 93XT104_5 point 41		OK		Walter Sigudla - 486333	Train
10312	A	Activate any PEA		OK		Walter Sigudla - 486333	Train
10313	R	Door is unlocked and can be manually opened		OK		Walter Sigudla - 486333	Train
10314	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10315	R	Read Defined Variable [TT] (MPU1)BCU2_TlNotInhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10316	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10317	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train

10318	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10319	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10320	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10321	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr2 = 1.0		OK	1	Walter Sigudla - 486333	Train
10322	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10323	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10324	A	Reset PEA using switch 44S6		OK		Walter Sigudla - 486333	Train
10325	A	Close the door opened above manually		OK		Walter Sigudla - 486333	Train
10326	R	Door safety loop is closed, contactor 51K1 and 51K2 are energized		OK		Walter Sigudla - 486333	Train
10327	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10328	R	Read Defined Variable [TT] (MPU1)BCU2_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10329	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10330	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10331	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10332	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10333	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10334	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10335	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train

10336	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10337	A	Press the red button 44S1 to make an emergency brake		OK		Walter Sigudla - 486333	Train
10338	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10339	R	Read Defined Variable [TT] (MPU1)BCU2_TlNotInhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10340	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10341	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10342	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10343	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10344	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10345	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr2 = 1.0		OK	1	Walter Sigudla - 486333	Train
10346	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10347	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10348	A	Release the red button 44S1 for emergency brake		OK		Walter Sigudla - 486333	Train
10349	A	Put the direction selector switch in NEUTRAL position and again in FORWARD position		OK		Walter Sigudla - 486333	Train
10350	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10351	R	Read Defined Variable [TT] (MPU1)BCU2_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10352	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train

10353	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10354	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10355	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10356	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10357	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10358	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10359	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10360	A	Force [TT] (MPU1)lo_drc_tc2tractionloopr2 = 0.0		OK		Walter Sigudla - 486333	Train
10361	A	Force [TT] (MPU1)lo_drc_tc2tractionloopr1 = 1.0		OK		Walter Sigudla - 486333	Train
10362	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10363	R	Read Defined Variable [TT] (MPU1)BCU2_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10364	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10365	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10366	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10367	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10368	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10369	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr2 = 0.0		OK	0	Walter Sigudla - 486333	Train

10370	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10371	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10372	A	Force [TT] (MPU1)lo_drc_tc2tractionloopr2 = 1.0		OK		Walter Sigudla - 486333	Train
10373	A	Force [TT] (MPU1)lo_drc_tc2tractionloopr1 = 0.0		OK		Walter Sigudla - 486333	Train
10374	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10375	R	Read Defined Variable [TT] (MPU1)BCU2_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10376	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10377	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10378	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10379	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10380	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10381	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10382	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10383	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10384	A	Force [TT] (MPU1)lo_drc_tc2tractionloopr2 = 0.0		OK		Walter Sigudla - 486333	Train
10385	A	Force [TT] (MPU1)lo_drc_tc2tractionloopr1 = 0.0		OK		Walter Sigudla - 486333	Train
10386	A	Put the direction selector switch in NEUTRAL position		OK		Walter Sigudla - 486333	Train

10387	R	Read Defined Variable [TT] (MPU1)TBCU1_TINotInhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10388	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10389	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10390	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10391	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10392	R	Read Defined Variable [TT] (MPU1)BCU2_TINotInhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10393	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10394	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr2 = 1.0		OK	1	Walter Sigudla - 486333	Train
10395	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10396	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10397	I	Traction Interlock Override TC2		OK		Walter Sigudla - 486333	Train
10398	A	Put the Traction Interlock switch 31S1 in OVERRIDE position		OK		Walter Sigudla - 486333	Train
10399	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10400	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10401	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr2 = 1.0		OK	1	Walter Sigudla - 486333	Train
10402	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10403	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider2 = 1.0		OK	1	Walter Sigudla - 486333	Train
10404	R	Read Defined Variable [TT] (MPU1)BCU2_TINotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train

10405	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10406	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10407	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10408	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 1.0		OK	1	Walter Sigudla - 486333	Train
10409	A	Put the Traction Interlock switch 31S1 in NORMAL position		OK		Walter Sigudla - 486333	Train
10410	R	Read Defined Variable [TT] (MPU1)bcu1_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10411	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10412	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractionauthorr2 = 1.0		OK	1	Walter Sigudla - 486333	Train
10413	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10414	R	Read Defined Variable [TT] (MPU1)li_drc_tc2tractintoverrider2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10415	R	Read Defined Variable [TT] (MPU1)BCU2_TlNotInhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10416	R	Read Defined Variable [TT] (MPU1)TBCU1_TlNotInhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10417	R	Read Defined Variable [TT] (MPU1)TBCU2_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10418	R	Read Defined Variable [TT] (MPU1)tbcu3_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10419	R	Read Defined Variable [TT] (MPU1)tbcu4_tlnotinhib = 0.0		OK	0	Walter Sigudla - 486333	Train
10420	A	Put the direction selector switch 30A1.S2 should be in NEUTRAL position		OK		Walter Sigudla - 486333	Train
10421	I	End of Test		OK		Walter Sigudla - 486333	Train

Section 20 – Deadman

20.3 Instructions list

20.3.1 060_DSD-Deadman

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	Deadman SPP = 060		OK		Dilikani Ngubane - 526515	Train
10002	I	Initial Conditions		OK		Walter Sigudla - 486333	Train
10003	I	The Traction and Emergency test procedure must be completed prior to performing this test		OK		Walter Sigudla - 486333	Train
10004	I	Lamp 60H2 is OFF		OK		Walter Sigudla - 486333	Train
10005	I	Master Controller is in Neutral position		OK		Walter Sigudla - 486333	Train
10006	I	No Driving Direction selected		OK		Walter Sigudla - 486333	Train
10007	I	Prepare train in LV ready with active cab on TC1		OK		Walter Sigudla - 486333	Train
10008	I	Start of Test		OK		Walter Sigudla - 486333	Train
10009	I	Deadman override TC1		OK		Walter Sigudla - 486333	Train
10010	R	Read Defined Variable [TT] (MPU1)li_dsd_tc1deadmanoverridr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10011	A	Put the override switch 60S1 to OVERRIDE position		OK		Walter Sigudla - 486333	Train
10012	R	Lamp 60H2 is "ON" on the alarm module		OK		Walter Sigudla - 486333	Train
10013	R	Verify that the Deadman override indication appears on the DDU screen		OK		Walter Sigudla - 486333	Train
10014	R	Read Defined Variable [TT] (MPU1)li_dsd_tc1deadmanoverridr2 = 1.0		OK	1	Walter Sigudla - 486333	Train
10015	A	Put the override switch 60S1 to NORMAL position		OK		Walter Sigudla - 486333	Train
10016	R	Read Defined Variable [TT] (MPU1)li_dsd_tc1deadmanoverridr1 = 0.0		OK	0	Walter Sigudla - 486333	Train

10017	R	Lamp 60H2 is OFF		OK		Walter Sigudla - 486333	Train
10018	I	Deadman by Master Controller TC1		OK		Walter Sigudla - 486333	Train
10019	R	Read Defined Variable [TT] (MPU1)li_dsd_tc1deadmanr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10020	A	Press the master controller Deadman switch 30A1.S4 and hold while reading variable below		OK		Walter Sigudla - 486333	Train
10021	R	Read Defined Variable [TT] (MPU1)li_dsd_tc1deadmanr1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10022	A	Release the Master Controller switch 30A1.S4		OK		Walter Sigudla - 486333	Train
10023	R	Read Defined Variable [TT] (MPU1)li_dsd_tc1deadmanr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10024	I	Deadman by button 60S3 TC1		OK		Walter Sigudla - 486333	Train
10025	R	Read Defined Variable [TT] (MPU1)li_dsd_tc1deadmanr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10026	A	Press the button 60S3 and hold it while reading variable below		OK		Walter Sigudla - 486333	Train
10027	R	Read Defined Variable [TT] (MPU1)li_dsd_tc1deadmanr1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10028	A	Release the button 60S3		OK		Walter Sigudla - 486333	Train
10029	R	Read Defined Variable [TT] (MPU1)li_dsd_tc1deadmanr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10030	I	Deadman functional test TC1		OK		Walter Sigudla - 486333	Train
10031	R	Read Defined Variable [TT] (MPU1)lo_dsd_tc1dmbuzzerr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10032	R	Read Defined Variable [TT] (MPU1)lo_dsd_tc1deadmanlampr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10033	R	Read Defined Variable [TT] (MPU1)li_dsd_tc1ebdeadmanrelayr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10034	A	Select Driving Direction to FORWARD		OK		Walter Sigudla - 486333	Train

10035	R	Read Defined Variable [TT] (MPU1)bcu1_tlneb = 0.0		OK	0	Walter Sigudla - 486333	Train
10036	I	After 2.5 seconds buzzer starts beeping		OK		Walter Sigudla - 486333	Train
10037	R	Lamp 60H1 is ON	DM	OK		Walter Sigudla - 486333	Train
10038	R	Read Defined Variable [TT] (MPU1)lo_dsd_tc1deadmanlampr1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10039	R	Read Defined Variable [TT] (MPU1)lo_dsd_tc1dmbuzzerr1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10040	I	A constant push on the button 60S3 or Master controller will result in Emergency brake		OK		Walter Sigudla - 486333	Train
10041	A	Press and hold down the master controller for about 2s		OK		Walter Sigudla - 486333	Train
10042	R	Lamp 60H1 is OFF		OK		Walter Sigudla - 486333	Train
10043	R	No sound from buzzer		OK		Walter Sigudla - 486333	Train
10044	A	Release master controller		OK		Walter Sigudla - 486333	Train
10045	I	After 2.5 seconds buzzer starts beeping		OK		Walter Sigudla - 486333	Train
10046	R	Lamp 60H1 is ON		OK		Walter Sigudla - 486333	Train
10047	A	Press and hold the button 60S3 for about 2s		OK		Walter Sigudla - 486333	Train
10048	R	Lamp 60H1 is OFF		OK		Walter Sigudla - 486333	Train
10049	R	No sound from buzzer		OK		Walter Sigudla - 486333	Train
10050	A	Release Deadman button 60S3		OK		Walter Sigudla - 486333	Train
10051	I	After 2.5 seconds buzzer starts beeping		OK		Walter Sigudla - 486333	Train
10052	R	After 5 seconds, emergency brake is applied	DM	OK		Walter Sigudla - 486333	Train
10053	R	Verify on the DDU that the Emergency brake by Deadman indication is ON		OK		Walter Sigudla - 486333	Train
10054	R	Read Defined Variable [TT]		OK	1	Walter Sigudla - 486333	Train

		(MPU1)li_dsd_tc1ebdeadmanrelayr1 = 1.0					
10055	R	Read Defined Variable [TT] (MPU1)bcu1_tlneb = 0.0		OK	0	Walter Sigudla - 486333	Train
10056	A	Select Driving direction to NEUTRAL and FORWARD again to reset the emergency brake		OK		Walter Sigudla - 486333	Train
10057	R	Read Defined Variable [TT] (MPU1)bcu1_tlneb = 0.0		OK	0	Walter Sigudla - 486333	Train
10058	A	Press down the Master controller and hold		OK		Walter Sigudla - 486333	Train
10059	I	After 45s, emergency brake is applied	DM	OK		Walter Sigudla - 486333	Train
10060	R	Verify on the DDU that the Emergency brake by Deadman indication is ON		OK		Walter Sigudla - 486333	Train
10061	R	Read Defined Variable [TT] (MPU1)li_dsd_tc1ebdeadmanrelayr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10062	A	Release the Master controller		OK		Walter Sigudla - 486333	Train
10063	A	Select the driving direction to NEUTRAL position		OK		Walter Sigudla - 486333	Train
10064	R	Read Defined Variable [TT] (MPU1)bcu1_tlneb = 0.0		OK	0	Walter Sigudla - 486333	Train
10065	A	Remove active cab on TC1		OK		Walter Sigudla - 486333	Train
10066	I	Deadman Override TC2		OK		Dilikani Ngubane - 526515	Train
10067	A	Active cab on TC2		OK		Dilikani Ngubane - 526515	Train
10068	I	Deadman override switch 60S1 must be in NORMAL position		OK		Dilikani Ngubane - 526515	Train
10069	R	Read Defined Variable [TT] (MPU1)li_dsd_tc2deadmanoverridr1 = 0.0		OK	0	Dilikani Ngubane - 526515	Train
10070	A	Put the Deadman override switch 60S1 to OVERRIDE position	DM	OK		Dilikani Ngubane - 526515	Train
10071	R	Verify on the DDU that the Deadman override indication is ON		OK		Dilikani Ngubane - 526515	Train

10072	R	Read Defined Variable [TT] (MPU1)li_dsd_tc2deadmanoverridr1 = 1.0		OK	1	Dilikani Ngubane - 526515	Train
10073	R	Lamp 60H2 is ON		OK		Dilikani Ngubane - 526515	Train
10074	A	Put the override switch 60S1 in NORMAL position		OK		Dilikani Ngubane - 526515	Train
10075	R	Read Defined Variable [TT] (MPU1)li_dsd_tc2deadmanoverridr1 = 0.0		OK	0	Dilikani Ngubane - 526515	Train
10076	R	Lamp 60H2 is OFF		OK		Dilikani Ngubane - 526515	Train
10077	I	Deadman by Master Controller TC2		OK		Dilikani Ngubane - 526515	Train
10078	R	Read Defined Variable [TT] (MPU1)li_dsd_tc2deadmanr2 = 0.0		OK	0	Dilikani Ngubane - 526515	Train
10079	A	Press the master controller Deadman switch 30A1.S4 and hold while reading variable below		OK		Dilikani Ngubane - 526515	Train
10080	R	Read Defined Variable [TT] (MPU1)li_dsd_tc2deadmanr2 = 1.0		OK	1	Dilikani Ngubane - 526515	Train
10081	A	Release the master controller		OK		Dilikani Ngubane - 526515	Train
10082	R	Read Defined Variable [TT] (MPU1)li_dsd_tc2deadmanr2 = 0.0		OK	0	Dilikani Ngubane - 526515	Train
10083	I	Deadman by button 60S3 TC2		OK		Dilikani Ngubane - 526515	Train
10084	R	Read Defined Variable [TT] (MPU1)li_dsd_tc2deadmanr1 = 0.0		OK	0	Dilikani Ngubane - 526515	Train
10085	A	Press the button 60S3 and hold it while reading the variable below		OK		Dilikani Ngubane - 526515	Train
10086	R	Read Defined Variable [TT] (MPU1)li_dsd_tc2deadmanr1 = 1.0		OK	1	Dilikani Ngubane - 526515	Train
10087	A	Release the button 60S3		OK		Dilikani Ngubane - 526515	Train
10088	R	Read Defined Variable [TT] (MPU1)li_dsd_tc2deadmanr1 = 0.0		OK	0	Dilikani Ngubane - 526515	Train
10089	R	Read Defined Variable [TT] (MPU1)li_dsd_tc2ebdeadmanrelayr1 = 0.0		OK	0	Dilikani Ngubane - 526515	Train

10090	I	Deadman functional test TC2		OK		Dilikani Ngubane - 526515	Train
10091	R	Read Defined Variable [TT] (MPU1)Io_dsd_tc2dmbuzzerr1 = 0.0		OK	0	Dilikani Ngubane - 526515	Train
10092	R	Read Defined Variable [TT] (MPU1)Io_dsd_tc2deadmanlampr1 = 0.0		OK	0	Dilikani Ngubane - 526515	Train
10093	A	Select Driving Direction to FORWARD		OK		Dilikani Ngubane - 526515	Train
10094	R	Read Defined Variable [TT] (MPU1)BCU2_TINeb = 0.0		OK	0	Dilikani Ngubane - 526515	Train
10095	I	After 2.5 seconds buzzer starts beeping		OK		Dilikani Ngubane - 526515	Train
10096	R	lamp 60H1 is ON	DM	OK		Dilikani Ngubane - 526515	Train
10097	R	Verify on the DDU screen that the Deadman active indication is ON		OK		Dilikani Ngubane - 526515	Train
10098	R	Read Defined Variable [TT] (MPU1)Io_dsd_tc2deadmanlampr1 = 1.0		OK	1	Dilikani Ngubane - 526515	Train
10099	R	Read Defined Variable [TT] (MPU1)Io_dsd_tc2dmbuzzerr1 = 1.0		OK	1	Dilikani Ngubane - 526515	Train
10100	I	A constant push on the button 60S3 or Master controller will result in Emergency brake		OK		Dilikani Ngubane - 526515	Train
10101	A	Press and hold down the master controller for about 2s		OK		Dilikani Ngubane - 526515	Train
10102	R	Lamp 60H1 is OFF		OK		Dilikani Ngubane - 526515	Train
10103	R	No sound from buzzer		OK		Dilikani Ngubane - 526515	Train
10104	A	Release the master controller		OK		Dilikani Ngubane - 526515	Train
10105	R	Read Defined Variable [TT] (MPU1)BCU2_TINeb = 0.0		OK	0	Dilikani Ngubane - 526515	Train
10106	R	After 2.5 seconds buzzer starts beeping		OK		Dilikani Ngubane - 526515	Train
10107	R	After 5 seconds, emergency brake is applied	DM	OK		Dilikani Ngubane - 526515	Train
10108	R	Verify on the DDU screen that the emergency brake applied by Deadman indication is ON		OK		Dilikani Ngubane - 526515	Train

10109	R	Read Defined Variable [TT] (MPU1)li_dsd_tc2ebdeadmanrelayr1 = 1.0		OK	1	Dilikani Ngubane - 526515	Train
10110	A	Select Driving direction to NEUTRAL and FORWARD again to reset the emergency brake		OK		Dilikani Ngubane - 526515	Train
10111	R	Read Defined Variable [TT] (MPU1)BCU2_TINeb = 0.0		OK	0	Dilikani Ngubane - 526515	Train
10112	A	Press down the Master controller and hold		OK		Dilikani Ngubane - 526515	Train
10113	R	After 45s, emergency brake is applied	DM	OK		Dilikani Ngubane - 526515	Train
10114	R	Verify on the DDU that the Emergency brake by Deadman indication is ON		OK		Dilikani Ngubane - 526515	Train
10115	R	Read Defined Variable [TT] (MPU1)li_dsd_tc2ebdeadmanrelayr1 = 0.0		OK	0	Dilikani Ngubane - 526515	Train
10116	A	Release the Master controller		OK		Dilikani Ngubane - 526515	Train
10117	A	Select the driving direction to NEUTRAL position		OK		Dilikani Ngubane - 526515	Train
10118	I	End of test		OK		Alleta Sekgololo - 417407	Train

Section 21 – Rescue Mode and Emergency Disconnection

21.3 Instructions list

21.3.1 027_ERM-Rescue Mode and Emergency Disconnection

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	Rescue Mode and Emergency Disconnection = SPP 027		OK		Mvelo Mthembu - 425564	Train
10002	I	Initial Conditions		OK		Mvelo Mthembu - 425564	Train
10003	I	Train in Normal mode with LV ready		OK		Mvelo Mthembu - 425564	Train
10004	I	Emergency brake is applied due to no direction selected on Train		OK		Mvelo Mthembu - 425564	Train
10005	I	The Blue button 27S5 must be released in TC1 and TC2		OK		Mvelo Mthembu - 425564	Train
10006	I	Start of Test		OK		Mvelo Mthembu - 425564	Train
10007	I	Back-up Mode TC1		OK		Mvelo Mthembu - 425564	Train
10008	A	Put the switch 27S1 in BACKUP position		OK		Mvelo Mthembu - 425564	Train
10009	R	The TCMS is not available on the DDU screen		OK		Mvelo Mthembu - 425564	Train
10010	R	Lamp 27H2 is ON		OK		Mvelo Mthembu - 425564	Train
10011	A	Timer 60.0 S		OK		Mvelo Mthembu - 425564	Train
10012	R	Both pantographs are raised		OK		Mvelo Mthembu - 425564	Train
10013	R	Both HSCBs are closed		OK		Mvelo Mthembu - 425564	Train
10014	R	Both ACUs are operational, sound can be heard from outside the train		OK		Mvelo Mthembu - 425564	Train
10015	R	All four traction units are in operation, sound can be heard from outside the train		OK		Mvelo Mthembu - 425564	Train
10016	R	There is a gradual increase in the main pipe pressure		OK		Mvelo Mthembu - 425564	Train
10017	R	HVAC units are operational in all cars		OK		Mvelo Mthembu - 425564	Train

10018	R	Emergency lighting is ON in all cars		OK		Mvelo Mthembu - 425564	Train
10019	I	Emergency Disconnection TC1		OK		Mvelo Mthembu - 425564	Train
10020	A	Push the button 27S5 to disconnect pantographs and open HSCBs		OK		Mvelo Mthembu - 425564	Train
10021	R	Both pantographs are lower and HSCBs are open		OK		Mvelo Mthembu - 425564	Train
10022	A	Release the button 27S5		OK		Mvelo Mthembu - 425564	Train
10023	I	Traction authorization TC1		OK		Mvelo Mthembu - 425564	Train
10024	A	Put the direction selector switch in FORWARD position		OK		Mvelo Mthembu - 425564	Train
10025	R	TA is authorized		OK		Mvelo Mthembu - 425564	Train
10026	R	Lamp 31H1 is ON on the alarm module		OK		Mvelo Mthembu - 425564	Train
10027	A	Put the direction selector switch in NEUTRAL position		OK		Mvelo Mthembu - 425564	Train
10028	R	TA is not authorized		OK		Mvelo Mthembu - 425564	Train
10029	R	Lamp 31H1 is OFF on the alarm module		OK		Mvelo Mthembu - 425564	Train
10030	I	Doors Operation TC1		OK		Mvelo Mthembu - 425564	Train
10031	A	Press the auth button 50S5 to open left doors		OK		Mvelo Mthembu - 425564	Train
10032	R	Check visually that all left doors are open		OK		Mvelo Mthembu - 425564	Train
10033	A	Press the auth button 50S6 to open right doors		OK		Mvelo Mthembu - 425564	Train
10034	R	Check visually that all right doors are open		OK		Mvelo Mthembu - 425564	Train
10035	A	Press the button 50S3 to close all the left doors		OK		Mvelo Mthembu - 425564	Train
10036	R	Check visually that all left doors are closed		OK		Mvelo Mthembu - 425564	Train
10037	A	Press the button 50S4 to close all right doors		OK		Mvelo Mthembu - 425564	Train

10038	R	Check visually that all right doors are closed		OK		Mvelo Mthembu - 425564	Train
10039	I	Emergency Brake TC1		OK		Mvelo Mthembu - 425564	Train
10040	A	Put the direction selector switch in FORWARD position		OK		Mvelo Mthembu - 425564	Train
10041	A	Apply emergency brake using the red button 44S1		OK		Mvelo Mthembu - 425564	Train
10042	R	Emergency brake is applied, lamp 44H4 is ON		OK		Mvelo Mthembu - 425564	Train
10043	R	Verify the pressure of the brake cylinder on the pneumatic gauge on the driver's desk		OK		Mvelo Mthembu - 425564	Train
10044	A	Release the emergency brake button 44S1		OK		Mvelo Mthembu - 425564	Train
10045	A	Put the direction selector switch in NEUTRAL position and again in FORWARD position to reset the emergency brake		OK		Mvelo Mthembu - 425564	Train
10046	A	Apply emergency brake using by putting the Master Controller in Emergency brake position		OK		Mvelo Mthembu - 425564	Train
10047	R	Emergency brake is applied, lamp 44H4 is ON		OK		Mvelo Mthembu - 425564	Train
10048	A	Put the Master controller in OFF position		OK		Mvelo Mthembu - 425564	Train
10049	A	Put the direction selector switch in NEUTRAL position		OK		Mvelo Mthembu - 425564	Train
10050	A	Switch OFF the train by putting the switch 18S1 in OFF position		OK		Mvelo Mthembu - 425564	Train
10051	A	Remove active cab on TC1		OK		Mvelo Mthembu - 425564	Train
10052	I	Back-up Mode TC2		OK		Mvelo Mthembu - 425564	Train
10053	R	Train is OFF		OK		Mvelo Mthembu - 425564	Train
10054	A	Active Cab on TC2		OK		Mvelo Mthembu - 425564	Train
10055	A	Switch ON the train using battery contactor 18S1		OK		Mvelo Mthembu - 425564	Train

10056	R	Train start-up in Normal mode, the TCMS is available on the DDU screen		OK		Mvelo Mthembu - 425564	Train
10057	A	Put the backup mode switch 27S1 in BACKUP position		OK		Mvelo Mthembu - 425564	Train
10058	R	The TCMS is no longer available on the DDU screen		OK		Mvelo Mthembu - 425564	Train
10059	R	Lamp 27H2 is ON		OK		Mvelo Mthembu - 425564	Train
10060	A	Timer 60.0 S		OK		Mvelo Mthembu - 425564	Train
10061	R	Both pantographs are raised		OK		Mvelo Mthembu - 425564	Train
10062	R	Both HSCBs are closed		OK		Mvelo Mthembu - 425564	Train
10063	R	Both ACUs are operational, sound can be heard from outside the train		OK		Mvelo Mthembu - 425564	Train
10064	R	All four traction units are in operation, sound can be heard from outside the train		OK		Mvelo Mthembu - 425564	Train
10065	R	There is a gradual increase in the main pipe pressure		OK		Mvelo Mthembu - 425564	Train
10066	R	HVAC units are operational in all cars		OK		Mvelo Mthembu - 425564	Train
10067	R	Emergency lighting is ON in all cars		OK		Mvelo Mthembu - 425564	Train
10068	I	Traction authorization TC2		OK		Mvelo Mthembu - 425564	Train
10069	A	Put the direction selector switch in FORWARD position		OK		Mvelo Mthembu - 425564	Train
10070	R	TA is authorized		OK		Mvelo Mthembu - 425564	Train
10071	R	Lamp 31H1 is "ON" on the alarm module		OK		Mvelo Mthembu - 425564	Train
10072	R	Relay 31K1 and 31K2 are energized		OK		Mvelo Mthembu - 425564	Train
10073	A	Put the direction selector switch in NEUTRAL position		OK		Mvelo Mthembu - 425564	Train
10074	R	TA is not authorized		OK		Mvelo Mthembu - 425564	Train
10075	R	Lamp 31H1 is OFF on the alarm module		OK		Mvelo Mthembu - 425564	Train

10076	R	Relay 31K1 and 31K2 are de-energized		OK		Mvelo Mthembu - 425564	Train
10077	I	Doors Operation TC2		OK		Mvelo Mthembu - 425564	Train
10078	A	Press the auth button 50S5 to open left doors		OK		Mvelo Mthembu - 425564	Train
10079	R	Check visually that all left doors are open		OK		Mvelo Mthembu - 425564	Train
10080	A	Press the auth button 50S6 to open right doors		OK		Mvelo Mthembu - 425564	Train
10081	R	Check visually that all right doors are open		OK		Mvelo Mthembu - 425564	Train
10082	A	Press the button 50S3 to close all the left doors		OK		Mvelo Mthembu - 425564	Train
10083	A	Put the direction selector switch in FORWARD position		OK		Mvelo Mthembu - 425564	Train
10084	R	Check visually that all left doors are closed		OK		Mvelo Mthembu - 425564	Train
10085	A	Press the button 50S4 to close all right doors		OK		Mvelo Mthembu - 425564	Train
10086	R	Check visually that all right doors are closed		OK		Mvelo Mthembu - 425564	Train
10087	I	Emergency Brake TC2		OK		Mvelo Mthembu - 425564	Train
10088	A	Put the direction selector switch in NEUTRAL and again in FORWARD position to reset the emergency brake		OK		Mvelo Mthembu - 425564	Train
10089	A	Apply emergency brake using the red button 44S1		OK		Mvelo Mthembu - 425564	Train
10090	R	Verify the pressure of the brake cylinder on the pneumatic gauge on the driver's desk		OK		Mvelo Mthembu - 425564	Train
10091	R	Release the emergency brake button 44S1		OK		Mvelo Mthembu - 425564	Train
10092	A	Apply emergency brake using by putting the Master controller is Emergency brake position		OK		Mvelo Mthembu - 425564	Train
10093	R	Emergency brake is applied, lamp 44H4 is ON		OK		Mvelo Mthembu - 425564	Train

10094	A	Put the Master controller in OFF position		OK		Mvelo Mthembu - 425564	Train
10095	R	Emergency brake is applied		OK		Mvelo Mthembu - 425564	Train
10096	A	Put the direction selector switch in NEUTRAL position and again in FORWARD position to reset the emergency brake		OK		Mvelo Mthembu - 425564	Train
10097	I	Emergency Disconnection TC2		OK		Mvelo Mthembu - 425564	Train
10098	A	Push the button 27S5 to disconnect pantographs and open HSCBs		OK		Mvelo Mthembu - 425564	Train
10099	R	Both pantographs are lower and HSCBs are open		OK		Mvelo Mthembu - 425564	Train
10100	A	Release the button 27S5		OK		Mvelo Mthembu - 425564	Train
10101	A	Put the direction selector switch in NEUTRAL position		OK		Mvelo Mthembu - 425564	Train
10102	A	Switch OFF the train by putting the switch 18S1 in OFF position		OK		Mvelo Mthembu - 425564	Train
10103	R	Train is OFF		OK		Mvelo Mthembu - 425564	Train
10104	A	Restart the train in Normal mode		OK		Mvelo Mthembu - 425564	Train
10105	I	End of Test		OK		Mvelo Mthembu - 425564	Train

Section 22 – ERTMS

22.3 Instructions list

22.3.1 062_ERTMS-ERTMS

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	ERTMS SPP=062		OK		Simphiwe Mkhonto - 463555	Train
10002	I	Safety Precautions		OK		Simphiwe Mkhonto - 463555	Train
10003	R	The ERTMS Warning Signs are attached in both ends underneath		OK		Simphiwe Mkhonto - 463555	Train
10004	I	No one should go near the Eurobalise Antennas during the test		OK		Simphiwe Mkhonto - 463555	Train
10005	I	ERTMS sim cards installation		OK		Simphiwe Mkhonto - 463555	Train
10006	A	Record the serial number of the sim card and install the sim cards on MT1 and MT2 cards respectively		OK		Simphiwe Mkhonto - 463555	Train
10007	R	Serial number for sim card installed on MT1 Result Min : 99999<= x ()		OK	89260420160520004291	Simphiwe Mkhonto - 463555	Train
10008	R	Serial number for sim card installed on MT2 Result Min : 99999<= x ()		OK	8926042016052000429 2	Simphiwe Mkhonto - 463555	Train
10009	I	ERTMS Complete Test		OK		Simphiwe Mkhonto - 463555	Train
10010	I	Perform the complete static test using the following procedure:		OK		Simphiwe Mkhonto - 463555	Train
10011	R	Static Test is complete		OK		Simphiwe Mkhonto - 463555	Train
10012	I	ERTMS Functional Test		OK		Simphiwe Mkhonto - 463555	Train
10013	I	The functional test should only be performed once ALL the software has been loaded and the Complete Test is done.		OK		Simphiwe Mkhonto - 463555	Train
10014	I	ERTMS Bypass		OK		Simphiwe Mkhonto - 463555	Train
10015	A	Activate cab TC1		OK		Simphiwe Mkhonto - 463555	Train
10016	A	Put the ERTMS isolation switch 62S1 in ISOLATION position		OK		Simphiwe Mkhonto - 463555	Train

10017	R	The IOS 524 is generated to inform the driver that the ERTMS has been bypassed in LV1 cubicle on TC1 or TC2		OK		Simphiwe Mkhonto - 463555	Train
10018	R	Read Defined Variable [TT] (MPU1)li_ets_tc1ertmsbypassr1 = 1.0		OK	1	Simphiwe Mkhonto - 463555	Train
10019	R	Read Defined Variable [TT] (MPU1)li_ets_tc1ertmsbypassr2 = 1.0		OK	1	Simphiwe Mkhonto - 463555	Train
10020	R	ERTMS bypass led 62H1 is "ON" on alarm module		OK		Simphiwe Mkhonto - 463555	Train
10021	R	ERTMS HMI is OFF on TC1		OK		Simphiwe Mkhonto - 463555	Train
10022	R	ERTMS EVC unit is OFF		OK		Simphiwe Mkhonto - 463555	Train
10023	R	The cold movement detector is ON		OK		Simphiwe Mkhonto - 463555	Train
10024	A	Put the direction selector switch in FORWARD position		OK		Simphiwe Mkhonto - 463555	Train
10025	A	Put the Master controller in EMERGENCY BRAKE position		OK		Simphiwe Mkhonto - 463555	Train
10026	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 1.0		OK	1	Simphiwe Mkhonto - 463555	Train
10027	A	Put Master controller in OFF position		OK		Simphiwe Mkhonto - 463555	Train
10028	A	Put the direction selector switch in NEUTRAL position and again in FORWARD position		OK		Simphiwe Mkhonto - 463555	Train
10029	R	Read Defined Variable [TT] UBK_EmgcyBrkApld = 0.0		OK	0	Simphiwe Mkhonto - 463555	Train
10030	A	Put the direction selector switch in NEUTRAL position		OK		Simphiwe Mkhonto - 463555	Train
10031	A	Put ERTMS isolation switch 62S1 in NORMAL position		OK		Simphiwe Mkhonto - 463555	Train
10032	R	Read Defined Variable [TT] (MPU1)li_ets_tc1ertmsbypassr1 = 0.0		OK	0	Simphiwe Mkhonto - 463555	Train
10033	R	Read Defined Variable [TT] (MPU1)li_ets_tc1ertmsbypassr2 = 0.0		OK	0	Simphiwe Mkhonto - 463555	Train
10034	R	ERTMS bypass led 62H1 is OFF on alarm module		OK		Simphiwe Mkhonto - 463555	Train

10035	R	ERTMS HMI is ON in TC1		OK		Simphiwe Mkhonto - 463555	Train
10036	I	ERTMS Fault Monitoring (SPP M 62/13)		OK		Simphiwe Mkhonto - 463555	Train
10037	A	Open circuit breaker S01 on ERTMS - 62A1 module		OK		Simphiwe Mkhonto - 463555	Train
10038	A	In M2 car, open the circuit breaker 25Q6		OK		Simphiwe Mkhonto - 463555	Train
10039	A	Remove -62XP1_X06 connector		OK		Simphiwe Mkhonto - 463555	Train
10040	A	In M2 car, close the circuit breaker 25Q6		OK		Simphiwe Mkhonto - 463555	Train
10041	R	Read Defined Variable [TT] (MPU1)li_ets_m2ertmsdcdc = 0.0		OK	0	Simphiwe Mkhonto - 463555	Train
10042	R	Read Defined Variable [TT] (MPU1)li_ets_m2ertmscb = 0.0		OK	0	Simphiwe Mkhonto - 463555	Train
10043	R	Read Defined Variable [TT] (MPU1)li_ets_m2ertmstemp = 0.0		OK	0	Simphiwe Mkhonto - 463555	Train
10044	R	Read Defined Variable [TT] (MPU1)li_ets_m2ertmsfan = 0.0		OK	0	Simphiwe Mkhonto - 463555	Train
10045	I	TEMPERATURE + FAN		OK		Simphiwe Mkhonto - 463555	Train
10046	A	In M2 car, open the circuit breaker 25Q6		OK		Simphiwe Mkhonto - 463555	Train
10047	A	Apply a shunt between pins 42 and 60, pin 78 and 96 on -62XP1_X06 connector.		OK		Simphiwe Mkhonto - 463555	Train
10048	A	In M2 car, close the circuit breaker 25Q6		OK		Simphiwe Mkhonto - 463555	Train
10049	R	Read Defined Variable [TT] (MPU1)li_ets_m2ertmstemp = 1.0		OK	1	Simphiwe Mkhonto - 463555	Train
10050	R	Read Defined Variable [TT] (MPU1)li_ets_m2ertmsfan = 1.0		OK	1	Simphiwe Mkhonto - 463555	Train
10051	A	In M2 car, open the circuit breaker 25Q6		OK		Simphiwe Mkhonto - 463555	Train
10052	A	Remove all jumpers and put back the connector -62XP1_X06		OK		Simphiwe Mkhonto - 463555	Train

10053	A	In M2 car, close the circuit breaker 25Q6		OK		Simphiwe Mkhonto - 463555	Train
10054	A	Close circuit breaker S01 on ERTMS - 62A1 module		OK		Simphiwe Mkhonto - 463555	Train
10055	R	Read Defined Variable [TT] (MPU1)li_ets_m2ertmsdcdc = 1.0		OK	1	Simphiwe Mkhonto - 463555	Train
10056	R	Read Defined Variable [TT] (MPU1)li_ets_m2ertmstemp = 1.0		OK	1	Simphiwe Mkhonto - 463555	Train
10057	I	110v/24v converters		OK		Simphiwe Mkhonto - 463555	Train
10058	A	Open circuit breaker S01 on ERTMS - 62A1 module		OK		Simphiwe Mkhonto - 463555	Train
10059	A	In M2 car, open the circuit breaker 25Q6		OK		Simphiwe Mkhonto - 463555	Train
10060	A	Remove one DC/DC power supply		OK		Simphiwe Mkhonto - 463555	Train
10061	A	In M2 car, close the circuit breaker 25Q6		OK		Simphiwe Mkhonto - 463555	Train
10062	A	Close circuit breaker S01 on ERTMS - 62A1 module		OK		Simphiwe Mkhonto - 463555	Train
10063	R	Read Defined Variable [TT] (MPU1)li_ets_m2ertmsdcdc = 0.0		OK	0	Simphiwe Mkhonto - 463555	Train
10064	A	Open circuit breaker S01 on ERTMS - 62A1 module		OK		Simphiwe Mkhonto - 463555	Train
10065	A	In M2 car, open the circuit breaker 25Q6		OK		Simphiwe Mkhonto - 463555	Train
10066	A	Put back the DC/DC power supply		OK		Simphiwe Mkhonto - 463555	Train
10067	I	INTERNAL CIRCUIT BREAKERS		OK		Simphiwe Mkhonto - 463555	Train
10068	A	In M2 car, close the circuit breaker 25Q6		OK		Simphiwe Mkhonto - 463555	Train
10069	A	Close circuit breaker S01 on ERTMS - 62A1 module		OK		Simphiwe Mkhonto - 463555	Train
10070	A	Open circuit breaker F01 and close all other circuit breakers from F02 - F20		OK		Simphiwe Mkhonto - 463555	Train
10071	R	Read Defined Variable [TT] (MPU1)li_ets_m2ertmscb = 0.0		OK	0	Simphiwe Mkhonto - 463555	Train

10072	A	Close circuit breaker F01 on ERTMS - 62A1 module		OK		Simphiwe Mkhonto - 463555	Train
10073	R	Read Defined Variable [TT] (MPU1)li_ets_m2ertmscb = 1.0		OK	1	Simphiwe Mkhonto - 463555	Train
10074	A	Open circuit breaker S01 on ERTMS - 62A1 module		OK		Simphiwe Mkhonto - 463555	Train
10075	R	ERTMS EVC unit is OFF		OK		Simphiwe Mkhonto - 463555	Train
10076	A	Normalize everything inside LV4 and leave all circuit breakers closed.		OK		Simphiwe Mkhonto - 463555	Train
10077	I	End of Test		OK		Simphiwe Mkhonto - 463555	Train

Section 23 – External lights and Signalling

23.3 Instructions list

23.3.1 072_SGL-External Visibility

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	External Visibility SPP=072		OK		Tshembhani Khosa - 446920	Train
10002	I	Initial Conditions		OK		Tshembhani Khosa - 446920	Train
10003	I	The air in the main should be at least 7.5bar		OK		Tshembhani Khosa - 446920	Train
10004	I	Start of Test		OK		Tshembhani Khosa - 446920	Train
10005	I	Windscreen wiper TC1		OK		Tshembhani Khosa - 446920	Train
10006	A	Active cab on TC1		OK		Tshembhani Khosa - 446920	Train
10007	A	Load the software on the TC1 wiper		OK		Tshembhani Khosa - 446920	Train
10008	I	Washer tank is empty		OK		Tshembhani Khosa - 446920	Train
10009	R	The IOS for low level on water tank appears on the Driver's event list		OK		Tshembhani Khosa - 446920	Train
10010	R	Read Defined Variable [TT] (MPU1)li_sgl_tc1washerlevel = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10011	A	Fill up the washer tank with clean water		OK		Tshembhani Khosa - 446920	Train
10012	R	Read Defined Variable [TT] (MPU1)li_sgl_tc1washerlevel = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10013	R	No IOS regarding low water level on Driver's event list		OK		Alleta Sekgololo - 417407	Train
10014	I	This test is to verify that the Wiper is centred		OK		Tshembhani Khosa - 446920	Train
10015	A	Put the wiper switch on Wash position		OK		Alleta Sekgololo - 417407	Train
10016	R	Water is spraying on the windscreen; the wiper is cleaning the windscreen		OK		Alleta Sekgololo - 417407	Train
10017	A	Put the wiper switch to intermittent position		OK		Alleta Sekgololo - 417407	Train

10018	R	The wiper is operating properly on intermittent position		OK		Alleta Sekgololo - 417407	Train
10019	A	Put the wiper switch to low speed position		OK		Alleta Sekgololo - 417407	Train
10020	R	The wiper is operating properly on low speed		OK		Alleta Sekgololo - 417407	Train
10021	A	Put the wiper switch to high speed position		OK		Alleta Sekgololo - 417407	Train
10022	R	Verify that the wiper does not lie too much on the left or right		OK		Alleta Sekgololo - 417407	Train
10023	A	Verify that the area wiped is at least as shown in the image attached		OK		Alleta Sekgololo - 417407	Train
10024	A	Put the swiper switch on OFF position		OK		Alleta Sekgololo - 417407	Train
10025	R	Wiper stops, no water is spraying on windscreen		OK		Alleta Sekgololo - 417407	Train
10026	I	Mirrors TC1		OK		Tshembhani Khosa - 446920	Train
10027	A	Login as a Maintainer ID: 70979080		OK		Tshembhani Khosa - 446920	Train
10028	I	It is necessary to open and close each mirror several times to ensure that it is working properly		OK		Tshembhani Khosa - 446920	Train
10029	A	Press the DOOR AUTH left button 50S5		OK		Tshembhani Khosa - 446920	Train
10030	A	Turn the switch 70S10 to the left to open the left mirror		OK		Tshembhani Khosa - 446920	Train
10031	R	Read Defined Variable [TT] (MPU1)Li_SGL_Tc1LeftMirror = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10032	R	Read Defined Variable [TT] (MPU1)Li_SGL_Tc1RightMirror = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10033	A	Check visually that the mirror is open wide enough to show the whole platform and image is not blurry when sitting on the driver's seat		OK		Tshembhani Khosa - 446920	Train
10034	R	Verify that there is no leak on the mirror's pneumatic piping		OK		Tshembhani Khosa - 446920	Train
10035	A	Press 50S3 left door close button		OK		Tshembhani Khosa - 446920	Train

10036	R	The mirror is properly closed		OK		Tshembhani Khosa - 446920	Train
10037	R	Read Defined Variable [TT] (MPU1)Li_SGL_Tc1LeftMirror = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10038	R	Read Defined Variable [TT] (MPU1)Li_SGL_Tc1RightMirror = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10039	A	Press the DOOR AUTH right button 50S6		OK		Tshembhani Khosa - 446920	Train
10040	A	Turn the switch 70S10 to the right to open the right mirror		OK		Tshembhani Khosa - 446920	Train
10041	R	Read Defined Variable [TT] (MPU1)Li_SGL_Tc1LeftMirror = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10042	R	Read Defined Variable [TT] (MPU1)Li_SGL_Tc1RightMirror = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10043	A	Check visually that the mirror is open wide enough to show the whole platform and image is not blurry when sitting on the driver's seat		OK		Tshembhani Khosa - 446920	Train
10044	R	Verify that there is no leak on the mirror's pneumatic piping		OK		Tshembhani Khosa - 446920	Train
10045	A	Press 50S4 right door close button		OK		Tshembhani Khosa - 446920	Train
10046	R	The mirror is properly closed		OK		Tshembhani Khosa - 446920	Train
10047	R	Read Defined Variable [TT] (MPU1)Li_SGL_Tc1LeftMirror = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10048	R	Read Defined Variable [TT] (MPU1)Li_SGL_Tc1RightMirror = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10049	A	Press the DOOR AUTH left button 50S5		OK		Tshembhani Khosa - 446920	Train
10050	A	Force [TT] (MPU1)lo_sgl_tc1leftmirror = 1.0		OK		Tshembhani Khosa - 446920	Train
10051	R	Left mirror is open		OK		Tshembhani Khosa - 446920	Train
10052	A	Force [TT] (MPU1)lo_sgl_tc1leftmirror = 0.0		OK		Tshembhani Khosa - 446920	Train
10053	R	Left mirror closes		OK		Tshembhani Khosa - 446920	Train
10054	A	Press the DOOR AUTH right button 50S6		OK		Tshembhani Khosa - 446920	Train

10055	A	Force [TT] (MPU1)Io_sgl_tc1rightmirror = 1.0		OK		Tshembhani Khosa - 446920	Train
10056	R	Right mirror opens		OK		Tshembhani Khosa - 446920	Train
10057	A	Force [TT] (MPU1)Io_sgl_tc1rightmirror = 0.0		OK		Tshembhani Khosa - 446920	Train
10058	R	Right mirror closes		OK		Tshembhani Khosa - 446920	Train
10059	A	Press the button 50S3 and 50S4 to reset door authorization		OK		Tshembhani Khosa - 446920	Train
10060	A	Release [TT] (MPU1)Io_sgl_tc1leftmirror		OK		Tshembhani Khosa - 446920	Train
10061	A	Release [TT] (MPU1)Io_sgl_tc1rightmirror		OK		Tshembhani Khosa - 446920	Train
10062	A	Isolate the valve H1.5/1 and H1.5/2		OK		Tshembhani Khosa - 446920	Train
10063	R	Check that the left and right mirrors can be folded manually		OK		Tshembhani Khosa - 446920	Train
10064	A	Normalise the valve H1.5/1 and H1.5/2		OK		Tshembhani Khosa - 446920	Train
10065	A	Login on the DDU screen using the driver's code 70787878		OK		Tshembhani Khosa - 446920	Train
10066	A	Go to Command Screen		OK		Tshembhani Khosa - 446920	Train
10067	A	Authorise OPEN DOOR LEFT and RIGHT using the button 50S5 and 50S6 respectively		OK		Tshembhani Khosa - 446920	Train
10068	A	On the DDU Command screen, open the left mirror using the virtual button		OK		Tshembhani Khosa - 446920	Train
10069	R	Left mirror opens		OK		Tshembhani Khosa - 446920	Train
10070	A	Press virtual button to open right mirror		OK		Tshembhani Khosa - 446920	Train
10071	R	Right mirror opens		OK		Tshembhani Khosa - 446920	Train
10072	A	Press the button 50S3 and 50S4 to reset door authorization		OK		Tshembhani Khosa - 446920	Train
10073	R	Both mirrors close		OK		Tshembhani Khosa - 446920	Train
10074	A	Remove active cab on TC1		OK		Tshembhani Khosa - 446920	Train

10075	I	External visibility TC2		OK		Tshembhani Khosa - 446920	Train
10076	I	Windscreen wiper TC2		OK		Tshembhani Khosa - 446920	Train
10077	A	Active cab on TC2		OK		Tshembhani Khosa - 446920	Train
10078	I	Load the software on the TC2 wiper		OK		Alleta Sekgololo - 417407	Train
10079	I	Washer tank is empty		OK		Tshembhani Khosa - 446920	Train
10080	R	The IOS for low level on water tank appears on the Driver's event list		OK		Tshembhani Khosa - 446920	Train
10081	R	Read Defined Variable [TT] (MPU1)Li_SGL_Tc2WasherLevel = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10082	A	Fill up the washer tank with clean water		OK		Alleta Sekgololo - 417407	Train
10083	R	Read Defined Variable [TT] (MPU1)Li_SGL_Tc2WasherLevel = 1.0		OK	1	Alleta Sekgololo - 417407	Train
10084	R	No IOS regarding low water level on Driver's event list		OK		Alleta Sekgololo - 417407	Train
10085	I	This test is to verify that the Wiper is centred		OK		Alleta Sekgololo - 417407	Train
10086	A	Put the swiper switch on Wash position		OK		Alleta Sekgololo - 417407	Train
10087	R	Water is spraying on the windscreen, the wiper is cleaning the windscreen		OK		Alleta Sekgololo - 417407	Train
10088	A	Put the wiper switch to intermittent position		OK		Alleta Sekgololo - 417407	Train
10089	R	The wiper is operating properly on intermittent position		OK		Alleta Sekgololo - 417407	Train
10090	A	Put the wiper switch to low speed position		OK		Alleta Sekgololo - 417407	Train
10091	R	The wiper is operating properly on low speed		OK		Alleta Sekgololo - 417407	Train
10092	A	Put the wiper switch to high speed position		OK		Alleta Sekgololo - 417407	Train
10093	A	Verify that the wiper does not lie too much on the left or right		OK		Alleta Sekgololo - 417407	Train

10094	R	Verify that the area wiped is at least as shown in the image above		OK		Alleta Sekgololo - 417407	Train
10095	A	Put the wiper switch on OFF position		OK		Alleta Sekgololo - 417407	Train
10096	R	Wiper stops, no water is spraying on windscreen		OK		Alleta Sekgololo - 417407	Train
10097	I	Mirrors TC2		OK		Tshembhani Khosa - 446920	Train
10098	A	Login as a Driver. ID:70787878		OK		Tshembhani Khosa - 446920	Train
10099	I	It is necessary to open and close each mirror several times to ensure that it is working properly		OK		Tshembhani Khosa - 446920	Train
10100	A	Press the DOOR AUTH left button 50S5		OK		Tshembhani Khosa - 446920	Train
10101	A	Turn the switch 70S10 to the left to open the left mirror		OK		Tshembhani Khosa - 446920	Train
10102	R	Read Defined Variable [TT] (MPU1)Li_SGL_Tc2LeftMirror = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10103	R	Read Defined Variable [TT] (MPU1)Li_SGL_Tc2RightMirror = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10104	A	Check visually that the mirror is open wide enough to show the whole platform and image is not blurry when sitting on the driver's seat		OK		Tshembhani Khosa - 446920	Train
10105	R	Verify that there is no leak on the mirror's pneumatic piping		OK		Tshembhani Khosa - 446920	Train
10106	A	Press 50S3 left door close button		OK		Tshembhani Khosa - 446920	Train
10107	R	The mirror is properly closed		OK		Tshembhani Khosa - 446920	Train
10108	R	Read Defined Variable [TT] (MPU1)Li_SGL_Tc2LeftMirror = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10109	R	Read Defined Variable [TT] (MPU1)Li_SGL_Tc2RightMirror = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10110	A	Press the DOOR AUTH right button 50S6		OK		Tshembhani Khosa - 446920	Train
10111	A	Turn the switch 70S10 to the right to open the right mirror		OK		Tshembhani Khosa - 446920	Train

10112	R	Read Defined Variable [TT] (MPU1)Li_SGL_Tc2LeftMirror = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10113	R	Read Defined Variable [TT] (MPU1)Li_SGL_Tc2RightMirror = 1.0		OK	1	Tshembhani Khosa - 446920	Train
10114	A	Check visually that the mirror is open wide enough to show the whole platform and image is not blurry when sitting on the driver's seat		OK		Tshembhani Khosa - 446920	Train
10115	R	Verify that there is no leak on the mirror's pneumatic piping		OK		Tshembhani Khosa - 446920	Train
10116	A	Press 50S4 right door close button		OK		Tshembhani Khosa - 446920	Train
10117	R	The mirror is properly closed		OK		Tshembhani Khosa - 446920	Train
10118	R	Read Defined Variable [TT] (MPU1)Li_SGL_Tc2LeftMirror = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10119	R	Read Defined Variable [TT] (MPU1)Li_SGL_Tc2RightMirror = 0.0		OK	0	Tshembhani Khosa - 446920	Train
10120	A	Press the DOOR AUTH left button 50S5		OK		Tshembhani Khosa - 446920	Train

Section 24 – On-board train data recorder

24.3 Instructions list

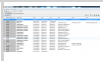
24.3.1 061_REC-OTDR

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	Event Recorder SPP= 061		OK		Celiwe Sokhela - 491462	Train
10002	I	Initial Conditions		OK		Celiwe Sokhela - 491462	Train
10003	I	Software must be updated in the OTDR with the latest baseline following below procedure		OK		Celiwe Sokhela - 491462	Train
10004	I	Software must be updated in the CPM according to the latest baseline following the below procedure		OK		Celiwe Sokhela - 491462	Train
10005	I	Train should be OFF		OK		Celiwe Sokhela - 491462	Train
10006	I	Start of Test		OK		Celiwe Sokhela - 491462	Train
10007	A	Prepare the train with active cabin on TC1		OK		Celiwe Sokhela - 491462	Train
10008	R	Read Defined Variable [TT] PNT_AllPantoRaised = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10009	R	Read Defined Variable [TT] HSC_HscbClosedNum = 2.0		OK	2	Celiwe Sokhela - 491462	Train
10010	I	Speedometer Test TC1		OK		Celiwe Sokhela - 491462	Train
10011	A	Remove Active Cabin on TC1 and activate it again		OK		Celiwe Sokhela - 491462	Train
10012	R	The speedometer indicator jumps from 0km/h to 200km/h and back within 3s		OK		Celiwe Sokhela - 491462	Train
10013	R	Speedometer lamp is ON		OK		Celiwe Sokhela - 491462	Train
10014	A	Force [TT] (MPU1)lo_rec_tc2speedindtest = 1.0		OK		Celiwe Sokhela - 491462	Train
10015	R	The speedometer indicator jumps from 0km/h to 200km/h and back within 3s		OK		Celiwe Sokhela - 491462	Train
10016	A	Release [TT] (MPU1)lo_rec_tc2speedindtest		OK		Celiwe Sokhela - 491462	Train

10017	I	OTDR Reset		OK		Celiwe Sokhela - 491462	Train
10018	I	When OTDR is resetting, the power supply LED will go OFF and ON		OK		Celiwe Sokhela - 491462	Train
10019	A	Force [TT] (MPU1)Io_ets_tc2rstotdrr1 = 1.0		OK		Celiwe Sokhela - 491462	Train
10020	A	Force [TT] (MPU1)Io_ets_tc2rstotdrr2 = 1.0		OK		Celiwe Sokhela - 491462	Train
10021	R	OTDR is OFF		OK		Celiwe Sokhela - 491462	Train
10022	I	During OTDR reset, the driver receives a warning about a loss in the OTDR.		OK		Celiwe Sokhela - 491462	Train
10023	A	Release [TT] (MPU1)Io_ets_tc2rstotdrr1		OK		Celiwe Sokhela - 491462	Train
10024	A	Release [TT] (MPU1)Io_ets_tc2rstotdrr2		OK		Celiwe Sokhela - 491462	Train
10025	I	OTDR is ON and reset		OK		Celiwe Sokhela - 491462	Train
10026	I	Data Recording		OK		Celiwe Sokhela - 491462	Train
10027	I	Please note the time one the DDU screen before performing the actions below		OK		Celiwe Sokhela - 491462	Train
10028	A	Put the Traction Interlock Switch 31S1 in OVERRIDE position		OK		Celiwe Sokhela - 491462	Train
10029	A	Put the Traction Interlock Switch 31S1 in NORMAL position		OK		Celiwe Sokhela - 491462	Train
10030	A	Pull any PEA on train		OK		Celiwe Sokhela - 491462	Train
10031	A	Acknowledge the PEA using the button 54S3		OK		Celiwe Sokhela - 491462	Train
10032	A	Reset PEA using Switch 44S6		OK		Celiwe Sokhela - 491462	Train
10033	A	Put the emergency brake loop override switch 44S2 in BYPASS position		OK		Celiwe Sokhela - 491462	Train
10034	A	Put the emergency brake loop override switch 44S2 in NORMAL position		OK		Celiwe Sokhela - 491462	Train
10035	A	Open HSCB using 22S12		OK		Celiwe Sokhela - 491462	Train

10036	A	Put the Direction Selector Switch in FORWARD position		OK		Celiwe Sokhela - 491462	Train
10037	A	Put the Direction Selector Switch in NEUTRAL position		OK		Celiwe Sokhela - 491462	Train
10038	A	Put the Direction Selector Switch in REVERSE position		OK		Celiwe Sokhela - 491462	Train
10039	A	Put the Driving Mode Switch to COUPLE/WASH mode		OK		Celiwe Sokhela - 491462	Train
10040	A	Before the next step verify that the HSCB is OPEN on the DDU - There is a risk of train movement		OK		Celiwe Sokhela - 491462	Train
10041	A	Put the Master Controller in TRACTION position		OK		Celiwe Sokhela - 491462	Train
10042	A	Put the Master Controller in BRAKE position		OK		Celiwe Sokhela - 491462	Train
10043	A	Put the Master Controller in OFF position		OK		Celiwe Sokhela - 491462	Train
10044	A	Put the Direction Selector Switch in NEUTRAL position		OK		Celiwe Sokhela - 491462	Train
10045	A	Push the RED Emergency brake button 44S1		OK		Celiwe Sokhela - 491462	Train
10046	A	Release Emergency brake button		OK		Celiwe Sokhela - 491462	Train
10047	A	Put the Door authorization Selector Switch 50S7 in DRIVER position		OK		Celiwe Sokhela - 491462	Train
10048	A	Press the right door authorization button 50S6		OK		Celiwe Sokhela - 491462	Train
10049	A	Press the right door open button 50S2 again and then close the door the right doors using button 50S4		OK		Celiwe Sokhela - 491462	Train
10050	A	Press the left door authorization button 50S5		OK		Celiwe Sokhela - 491462	Train
10051	A	Press the left door open button 50S1 again and then close the door the left doors using button 50S3		OK		Celiwe Sokhela - 491462	Train
10052	A	Put the Door authorization Selector Switch 50S7 in ERTMS position		OK		Celiwe Sokhela - 491462	Train

10053	A	Put the ERTMS isolation switch 62S1 in ISOLATION position		OK		Celiwe Sokhela - 491462	Train
10054	A	Put the ERTMS isolation switch 62S1 in NORMAL position		OK		Celiwe Sokhela - 491462	Train
10055	A	Note the time on the DDU		OK		Celiwe Sokhela - 491462	Train
10056	A	Put the backup mode switch 27S1 in BACKUP position		OK		Celiwe Sokhela - 491462	Train
10057	A	Switch OFF the train on TC1 cab		OK		Celiwe Sokhela - 491462	Train
10058	A	Put the backup Mode switch in NORMAL position		OK		Celiwe Sokhela - 491462	Train
10059	A	Switch active cab to TC2		OK		Celiwe Sokhela - 491462	Train
10060	I	Events download		OK		Celiwe Sokhela - 491462	Train
10061	A	Switch ON the train from TC2 side		OK		Celiwe Sokhela - 491462	Train
10062	A	Note the time on the DDU		OK		Celiwe Sokhela - 491462	Train
10063	I	Use the time noted down before and after recording the data to check the events		OK		Celiwe Sokhela - 491462	Train
10064	A	Connect to the OTDR via TCMS network and download the two latest events files. See the manual below		OK		Celiwe Sokhela - 491462	Train
10065	A	Connect to the CPM front face RJ45 port and download the latest events file. See the manual below		OK		Celiwe Sokhela - 491462	Train
10066	I	Data Recorded Reading		OK		Celiwe Sokhela - 491462	Train
10067	A	Use SAM5 build 81 software to read data recorded from the OTDR. For the CPM use SAM5 build 88		OK		Celiwe Sokhela - 491462	Train
10068	I	The recorded data must be in the sequence as logged above. NB time for activation and deactivation of each input must be within the time at which the test was performed. See example below for recorded data		OK		Celiwe Sokhela - 491462	Train
10069	R	CAB TC1 ACTIVE: ON		OK		Celiwe Sokhela - 491462	Train

10070	R	CAB TC2 ACTIVE: OFF		OK		Celiwe Sokhela - 491462	Train
10071	R	TRACTION INTERLOCK BYPASS: ON		OK		Celiwe Sokhela - 491462	Train
10072	R	TRACTION INTERLOCK BYPASS: OFF		OK		Celiwe Sokhela - 491462	Train
10073	R	BRAKE APPLIED: ON		OK		Celiwe Sokhela - 491462	Train
10074	R	PEA LOOP(OTDR): OFF		OK		Celiwe Sokhela - 491462	Train
10075	R	PEA LOOP(OTDR): ON		OK		Celiwe Sokhela - 491462	Train
10076	R	EMERGENCY BRAKE LOOP OVERRIDE: OFF		OK		Celiwe Sokhela - 491462	Train
10077	R	EMERGENCY BRAKE LOOP OVERRIDE: ON		OK		Celiwe Sokhela - 491462	Train
10078	R	FORWARD: ON		OK		Celiwe Sokhela - 491462	Train
10079	R	TRACTION: ON		OK		Celiwe Sokhela - 491462	Train
10080	R	BRAKE APPLIED: OFF		OK		Celiwe Sokhela - 491462	Train
10081	R	NO BRAKE: ON		OK		Celiwe Sokhela - 491462	Train
10082	R	NO BRAKE: OFF		OK		Celiwe Sokhela - 491462	Train
10083	R	FORWARD: OFF		OK		Celiwe Sokhela - 491462	Train
10084	R	TRACTION: OFF		OK		Celiwe Sokhela - 491462	Train
10085	R	REVERSE: OFF		OK		Celiwe Sokhela - 491462	Train
10086	R	REVERSE: ON		OK		Celiwe Sokhela - 491462	Train
10087	R	EMERGENCY BRAKE TRAINLINE: OFF		OK		Celiwe Sokhela - 491462	Train
10088	R	EMERGENCY BRAKE TRAINLINE: ON		OK		Celiwe Sokhela - 491462	Train
10089	R	DOOR AUTH LEFT TRAINLINE: OFF		OK		Celiwe Sokhela - 491462	Train
10090	R	DOOR AUTH LEFT TRAINLINE: ON		OK		Celiwe Sokhela - 491462	Train
10091	R	DOOR AUTH RIGHT TRAINLINE: ON		OK		Celiwe Sokhela - 491462	Train
10092	R	DOOR AUTH RIGHT TRAINLINE: OFF		OK		Celiwe Sokhela - 491462	Train

10093	R	ERTMS BYPASS: OFF		OK		Celiwe Sokhela - 491462	Train
10094	R	ERTMS BYPASS: ON		OK		Celiwe Sokhela - 491462	Train
10095	R	BACKUP MODE: OFF		OK		Celiwe Sokhela - 491462	Train
10096	R	BACKUP MODE: ON		OK		Celiwe Sokhela - 491462	Train
10097	R	CAB TC1 ACTIVE: OFF		OK		Celiwe Sokhela - 491462	Train
10098	R	CAB TC2 ACTIVE: ON		OK		Celiwe Sokhela - 491462	Train
10099	A	Save all the downloaded files from CPM and OTDR and put them in a folder named "TSXXX_OTDR." Then save the folder to "teams" channel (shift reports) under a specific trainset folder.		OK		Celiwe Sokhela - 491462	Train
10100	I	Speedometer Test TC2		OK		Celiwe Sokhela - 491462	Train
10101	A	Remove active cab on TC2 and activate it again		OK		Celiwe Sokhela - 491462	Train
10102	R	The speedometer indicator jumps from 0km/h to 200km/h and back within 3s		OK		Celiwe Sokhela - 491462	Train
10103	R	Speedometer lamp is ON		OK		Celiwe Sokhela - 491462	Train
10104	A	Force [TT] (MPU1)lo_rec_tc2speedindtest = 1.0		OK		Celiwe Sokhela - 491462	Train
10105	R	The speedometer indicator jumps from 0km/h to 200km/h and back within 3s		OK		Celiwe Sokhela - 491462	Train
10106	R	Speedometer lamp is ON		OK		Celiwe Sokhela - 491462	Train
10107	A	Release [TT] (MPU1)lo_rec_tc2speedindtest		OK		Celiwe Sokhela - 491462	Train
10108	I	OTDR settings		OK		Celiwe Sokhela - 491462	Train
10109	A	Force [TT] (MPU2)_REC_TravelledDistanceKm = 10.0		OK		Celiwe Sokhela - 491462	Train
10110	A	Force [TT] (MPU1)_REC_TravelledDistanceKm = 10.0		OK		Celiwe Sokhela - 491462	Train

10111	R	The total distance on the odometer of the DDU screen is 10km		OK		Celiwe Sokhela - 491462	Train
10112	A	Release [TT] (MPU1)_REC_TravelledDistanceKm		OK		Celiwe Sokhela - 491462	Train
10113	A	Release [TT] (MPU2)_REC_TravelledDistanceKm		OK		Celiwe Sokhela - 491462	Train
10114	A	Configure the OTDR and Data plug according to the settings in the file below		OK		Celiwe Sokhela - 491462	Train
10115	R	Train UIC is set to 0120XXX		OK		Celiwe Sokhela - 491462	Train
10116	R	The Wheel diameter is set to 840mm on the DDU Driver screen		OK		Celiwe Sokhela - 491462	Train
10117	I	End of Test		OK		Celiwe Sokhela - 491462	Train

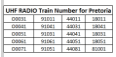
Section 25 – Train Ground Communication

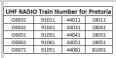
25.3 Instructions list

25.3.1 063_UHF_065_GSM-UHF and GSM Radio

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	GSMR Radio SPP=065		OK		Mpumelelo Sithole - 529980	Train
10002	I	GSMR - Functional Test TC1		OK		Mpumelelo Sithole - 529980	Train
10003	R	Record the serial number of the sim card and install the sim card on GSMR radio Result Min : 99999<= x ()		OK	89260420160520003612	Mpumelelo Sithole - 529980	Train
10004	A	Insert the SIM card into the GSMR Radio		OK		Mpumelelo Sithole - 529980	Train
10005	R	Ensure the GSM Sim card has been inserted into the GSMR Radio, and there is no red flashing light close to the sim card slot		OK		Mpumelelo Sithole - 529980	Train
10006	A	On the GSMR HMI, verify radio is not faulty		OK		Mpumelelo Sithole - 529980	Train
10007	A	Active cab in TC1		OK		Mpumelelo Sithole - 529980	Train
10008	I	DDU-HMI Connection		OK		Mpumelelo Sithole - 529980	Train
10009	A	Check if TCMS DDU and GSMR-HMI times are automatically synchronised - do not manually set the time		OK		Mpumelelo Sithole - 529980	Train
10010	R	The time is the same (allowable difference of <10s)		OK		Mpumelelo Sithole - 529980	Train
10011	I	PACIS-HMI Connection		OK		Mpumelelo Sithole - 529980	Train
10012	A	Lift the GSMR handset		OK		Mpumelelo Sithole - 529980	Train
10013	A	Press the PA button on the GSMR HMI		OK		Mpumelelo Sithole - 529980	Train
10014	R	On the GSMR module PAI card, the Red and Ack LEDs light green		OK		Alleta Sekgololo - 417407	Train
10015	R	The PA indication alarm sounds in all cars		OK		Alleta Sekgololo - 417407	Train

10016	A	Press the PTT on the handset and speak into the handset microphone		OK		Alleta Sekgololo - 417407	Train
10017	R	Text displayed on the HMI: "Talk!"		OK		Alleta Sekgololo - 417407	Train
10018	R	Your voice can be heard clearly in all the cars		OK		Alleta Sekgololo - 417407	Train
10019	I	UHF Radio Test TC1		OK		Mpumelelo Sithole - 529980	Train
10020	A	Enter each mission number below on the attached picture and press select on the UHF handheld		OK		Mpumelelo Sithole - 529980	Train
10021	R	The Radio displays the selected number e.g. "D 9104" and the network bars are visible		OK		Mpumelelo Sithole - 529980	Train
10022	A	To test the next number, press and hold the off button to switch off the handheld and switch on the handheld again, then enter the new number.		OK		Mpumelelo Sithole - 529980	Train
10023	R	All mission numbers on the above picture are tested ok		OK		Mpumelelo Sithole - 529980	Train
10024	I	GSMR - Functional Test TC2		OK		Mpumelelo Sithole - 529980	Train
10025	A	Active Cab in TC2		OK		Mpumelelo Sithole - 529980	Train
10026	R	Record the serial number of the sim card and install the sim card on GSMR radio Result Min : 99999<= x ()		OK	89260420160520003613	Mpumelelo Sithole - 529980	Train
10027	A	Insert the SIM card into the GSMR Radio		OK		Mpumelelo Sithole - 529980	Train
10028	R	Ensure the GSM Sim card has been inserted into the GSMR Radio, and there is no red flashing light close to the sim card slot		OK		Mpumelelo Sithole - 529980	Train
10029	A	On the GSMR HMI, verify radio is not faulty		OK		Mpumelelo Sithole - 529980	Train
10030	I	DDU-HMI Connection		OK		Mpumelelo Sithole - 529980	Train
10031	A	Check if TCMS DDU and GSMR-HMI times are automatically synchronised - do not manually set the time		OK		Mpumelelo Sithole - 529980	Train

10032	R	The time is the same (allowable difference of <10s)		OK		Mpumelelo Sithole - 529980	Train
10033	I	PACIS-HMI Connection		OK		Mpumelelo Sithole - 529980	Train
10034	A	Lift the GSMR handset		OK		Mpumelelo Sithole - 529980	Train
10035	A	Press the PA button on the GSMR HMI		OK		Mpumelelo Sithole - 529980	Train
10036	R	On the GSMR module PAI card, the Red and Ack LEDs light green		OK		Alleta Sekgololo - 417407	Train
10037	R	The PA indication alarm sounds in all cars		OK		Alleta Sekgololo - 417407	Train
10038	A	Press the PTT on the handset and speak into the handset microphone		OK		Alleta Sekgololo - 417407	Train
10039	R	Text displayed on the HMI: "Talk!"		OK		Alleta Sekgololo - 417407	Train
10040	R	Your voice can be heard clearly in all the cars		OK		Alleta Sekgololo - 417407	Train
10041	I	UHF Radio Test TC2		OK		Mpumelelo Sithole - 529980	Train
10042	A	Enter each mission number below on the attached picture and press select on the UHF handheld		OK		Mpumelelo Sithole - 529980	Train
10043	R	The Radio displays the selected number e.g. "D 9104" and the network bars are visible		OK		Mpumelelo Sithole - 529980	Train
10044	A	To test the next number, press and hold the off button to switch off the handheld and switch on the handheld again, then enter the new number.		OK		Mpumelelo Sithole - 529980	Train
10045	R	All mission numbers on the above picture are tested ok		OK		Mpumelelo Sithole - 529980	Train

25.3.2 064_NBX-Netbox

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	064 Netbox		OK		Mpumelelo Sithole - 529980	Train
10002	I	Software upload		OK		Mpumelelo Sithole - 529980	Train
10003	I	Use the below procedure to install the software on the Netbox(M1)		OK		Mpumelelo Sithole - 529980	Train
10004	A	-Open the NBX (64Q1) circuit breaker -Insert the programmed USB into the slot -Close the NBX (64Q1) circuit breaker -Device is on and software upload begins Upload is complete when all LEDs on rows A and C are steady, on and green as the image attached		OK		Mpumelelo Sithole - 529980	Train
10005	I	Netbox configuration check		OK		Mpumelelo Sithole - 529980	Train
10006	A	Perform the attached procedure to configure the Netbox (M1)		OK		Mpumelelo Sithole - 529980	Train
10007	R	The Netbox is configured correctly		OK		Mpumelelo Sithole - 529980	Train
10008	R	The time and date on the DDU is correct - if not restart the train and verify again		OK		Mpumelelo Sithole - 529980	Train

Section 26 – Traction Converter

26.3 Instructions list

26.3.1 033_TRC-Traction Converter

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	Traction and Electric braking SPP=033		OK		Sqiniseko Xulu - 493646	Train
10002	I	Initial Conditions		OK		Sqiniseko Xulu - 493646	Train
10003	I	Train is prepared with High voltage		OK		Sqiniseko Xulu - 493646	Train
10004	I	Master controller is in OFF position		OK		Sqiniseko Xulu - 493646	Train
10005	I	All traction units are in black colour on the DDU maintenance screen		OK		Sqiniseko Xulu - 493646	Train
10006	I	Start of Test		OK		Sqiniseko Xulu - 493646	Train
10007	A	Put the driving selector switch in FORWARD position		OK		Sqiniseko Xulu - 493646	Train
10008	R	Check on the DDU that all traction units are in FWD position		OK		Sqiniseko Xulu - 493646	Train
10009	A	Put the driving selector switch in REVERSE position		OK		Sqiniseko Xulu - 493646	Train
10010	R	Check on the DDU that all traction units are in REV position		OK		Sqiniseko Xulu - 493646	Train
10011	A	Put the driving selector switch in NEUTRAL position		OK		Sqiniseko Xulu - 493646	Train
10012	I	Traction Fault and reset		OK		Sqiniseko Xulu - 493646	Train
10013	A	Open HSCB using button 22S12		OK		Sqiniseko Xulu - 493646	Train
10014	A	Open the circuit breaker 33Q3 in M4 car		OK		Sqiniseko Xulu - 493646	Train
10015	R	Traction unit of M4 appear in fault on the DDU and an IOS is generated about loss of traction 25%		OK		Sqiniseko Xulu - 493646	Train
10016	A	Close the circuit breaker 33Q3		OK		Sqiniseko Xulu - 493646	Train
10017	A	Press the DDU virtual button RESET TRACTION FAULTS		OK		Sqiniseko Xulu - 493646	Train

10018	R	Traction unit for M4 is back in service, the IOS generated above has disappeared		OK		Sqiniseko Xulu - 493646	Train
10019	A	Open the circuit breaker 33Q3 in M1 car		OK		Sqiniseko Xulu - 493646	Train
10020	R	Traction unit of M1 appear in fault on the DDU and an IOS is generated about loss of traction 25%		OK		Sqiniseko Xulu - 493646	Train
10021	A	Close circuit breaker 33Q3 in M1 car		OK		Sqiniseko Xulu - 493646	Train
10022	A	Press the DDU virtual button RESET TRACTION FAULTS		OK		Sqiniseko Xulu - 493646	Train
10023	R	Traction unit for M1 is back in service, the IOS generated above has disappeared		OK		Sqiniseko Xulu - 493646	Train
10024	A	Open the circuit breaker 33Q3 in M2 car		OK		Sqiniseko Xulu - 493646	Train
10025	R	Traction unit of M2 appear in fault on the DDU and an IOS is generated about loss of traction 25%		OK		Sqiniseko Xulu - 493646	Train
10026	A	Close the circuit breaker 33Q3 in M2 car		OK		Sqiniseko Xulu - 493646	Train
10027	A	Press the DDU virtual button RESET TRACTION FAULTS		OK		Sqiniseko Xulu - 493646	Train
10028	R	Traction unit for M2 is back in service, the IOS generated above has disappeared		OK		Sqiniseko Xulu - 493646	Train
10029	A	Open the circuit breaker 33Q3 in M3 car		OK		Sqiniseko Xulu - 493646	Train
10030	R	Traction unit of M3 appear in fault on the DDU and an IOS is generated about loss of traction 25%		OK		Sqiniseko Xulu - 493646	Train
10031	A	Close the circuit breaker 33Q3 in M3 car		OK		Sqiniseko Xulu - 493646	Train
10032	A	Press the DDU virtual button RESET TRACTION FAULTS		OK		Sqiniseko Xulu - 493646	Train
10033	R	Traction unit for M3 is back in service, the IOS generated above has disappeared		OK		Sqiniseko Xulu - 493646	Train

10034	A	Close HSCBs using button 22S11		OK		Sqiniseko Xulu - 493646	Train
10035	I	End of Test		OK		Sqiniseko Xulu - 493646	Train

Section 27 – CCTV Video Information

27.3 Instructions list

27.3.1 055_CCTV-Video Information

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	CCTV SPP=066		OK		Celiwe Sokhela - 491462	Train
10002	I	Front camera footage TC1		OK		Celiwe Sokhela - 491462	Train
10003	A	Active Cab on TC1 and Login as Driver: 70787878		OK		Celiwe Sokhela - 491462	Train
10004	A	Press and hold the FRONT EVENT BUTTON 66S1 on TC1		OK		Celiwe Sokhela - 491462	Train
10005	R	Read Defined Variable [TT] (MPU1)Li_CTV_Tc1CctvEventPbR1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10006	R	Read Defined Variable [TT] (MPU1)Li_CTV_Tc1CctvEventPbR2 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10007	R	The FRONT EVENT button lamp 66S1 is ON		OK		Celiwe Sokhela - 491462	Train
10008	A	Release the button 66S1		OK		Celiwe Sokhela - 491462	Train
10009	R	Read Defined Variable [TT] (MPU1)Li_CTV_Tc1CctvEventPbR1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10010	R	Read Defined Variable [TT] (MPU1)Li_CTV_Tc1CctvEventPbR2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10011	R	The FRONT EVENT button lamp 66S1 is OFF		OK		Celiwe Sokhela - 491462	Train
10012	A	On the DDU screen, check if the Camera is correctly adjusted		OK		Celiwe Sokhela - 491462	Train
10013	A	The picture on the DDU should be as the picture attached.		OK		Celiwe Sokhela - 491462	Train
10014	I	Reverse direction front camera functional test TC1		OK		Celiwe Sokhela - 491462	Train
10015	A	Put the direction selector switch in REVERSE position		OK		Celiwe Sokhela - 491462	Train

10016	R	CCTV footage of TC2 front camera appears on the DDU		OK		Celiwe Sokhela - 491462	Train
10017	A	Put the direction selector switch in NEUTRAL position		OK		Celiwe Sokhela - 491462	Train
10018	R	CCTV footage of TC2 front camera does not appear on the DDU		OK		Celiwe Sokhela - 491462	Train
10019	A	Remove active cab on TC1		OK		Celiwe Sokhela - 491462	Train
10020	I	Front camera footage TC2		OK		Celiwe Sokhela - 491462	Train
10021	A	Active cab on TC2 and Login as Driver: 70787878		OK		Celiwe Sokhela - 491462	Train
10022	A	Press and hold the FRONT EVENT BUTTON 66S1 on TC2		OK		Celiwe Sokhela - 491462	Train
10023	R	Read Defined Variable [TT] (MPU1)Li_CTV_Tc2CctvEventPbR1 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10024	R	Read Defined Variable [TT] (MPU1)Li_CTV_Tc2CctvEventPbR2 = 1.0		OK	1	Celiwe Sokhela - 491462	Train
10025	R	The FRONT EVENT button lamp 66S1 is ON		OK		Celiwe Sokhela - 491462	Train
10026	A	Release the button 66S1		OK		Celiwe Sokhela - 491462	Train
10027	R	Read Defined Variable [TT] (MPU1)Li_CTV_Tc1CctvEventPbR1 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10028	R	Read Defined Variable [TT] (MPU1)Li_CTV_Tc1CctvEventPbR2 = 0.0		OK	0	Celiwe Sokhela - 491462	Train
10029	R	The FRONT EVENT button lamp 66S1 is OFF		OK		Celiwe Sokhela - 491462	Train
10030	A	On the DDU screen, check if the Camera is correctly adjusted		OK		Celiwe Sokhela - 491462	Train
10031	A	The picture on the DDU should be as the picture attached.		OK		Celiwe Sokhela - 491462	Train
10032	I	Reverse direction front camera functional test TC2		OK		Celiwe Sokhela - 491462	Train
10033	A	Put the direction selector switch in REVERSE position		OK		Celiwe Sokhela - 491462	Train

10034	R	CCTV footage of TC1 front camera appears on the DDU		OK		Celiwe Sokhela - 491462	Train
10035	A	Put the direction selector switch in NEUTRAL position		OK		Celiwe Sokhela - 491462	Train
10036	R	CCTV footage of TC1 front camera does not appear on the DDU		OK		Celiwe Sokhela - 491462	Train
10037	I	NVR Recording		OK		Celiwe Sokhela - 491462	Train
10038	A	Ensure that the NVR in both TC1 and TC2 is locked according to the image below (the black box representing the direction of the key). A locked NVR has an OFF HD LED - After locking the NVR it will take some time for the HD LED to switch OFF		OK		Celiwe Sokhela - 491462	Train
10039	R	The TC1 NVR is locked, and the HD LED is OFF		OK		Celiwe Sokhela - 491462	Train
10040	R	The TC2 NVR is locked, and the HD LED is OFF		OK		Celiwe Sokhela - 491462	Train
10041	A	Using the procedure attached, confirm that both NVRs are recording video data		OK		Celiwe Sokhela - 491462	Train
10042	A	Take a screenshot of the CCTV console live stream to indicate the recorder is working for NVR1		OK		Alleta Sekgololo - 417407	Train
10043	R	save the screenshot as TSXX_NVR1		OK		Alleta Sekgololo - 417407	Train
10044	A	Take a screenshot of the CCTV console live stream to indicate the recorder is working for NVR2		OK		Alleta Sekgololo - 417407	Train
10045	R	Save the screenshot as TSXX_NVR2		OK		Alleta Sekgololo - 417407	Train

Section 28 – PACIS

28.3 Instructions list

28.3.1 054_PIS-Passenger Information System

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	Pacis system = SPP 054 PIS		OK		Walter Sigudla - 486333	Train
10002	I	Software Upload		OK		Walter Sigudla - 486333	Train
10003	A			OK		Walter Sigudla - 486333	Train
10004	A			OK		Walter Sigudla - 486333	Train
10005	A			OK		Walter Sigudla - 486333	Train
10006	R	Verify on the DDU, referring to the baseline spreadsheet, that all Pacis devices are updated with the latest software versions		OK		Walter Sigudla - 486333	Train
10007	I	Camera Orientation		OK		Sqiniseko Xulu - 493646	Train
10008	I	The camera should show at least the complete gangway between two cars, luggage racks, the Interior display as well as the dead zones on the left and right of the doors.		OK		Sqiniseko Xulu - 493646	Train
10009	A	Adjust the saloon cameras according to the image shown below. The Interior display should appear fully on the image as well as up to at least the first 2 doors of the neighbouring car		OK		Sqiniseko Xulu - 493646	Train
10010	A	Please note any cameras showing green strips or unclear images should be updated settings using the attached procedure		OK		Sqiniseko Xulu - 493646	Train
10011	R	The Saloon cameras on TC1 have been adjusted according to image above.		OK		Sqiniseko Xulu - 493646	Train
10012	R	The Saloon cameras on M4 have been adjusted according to image above.		OK		Sqiniseko Xulu - 493646	Train
10013	R	The Saloon cameras on M1 have been adjusted according to image above.		OK		Sqiniseko Xulu - 493646	Train

10014	R	The Saloon cameras on M2 have been adjusted according to image above.		OK		Sqiniseko Xulu - 493646	Train
10015	R	The Saloon cameras on M3 have been adjusted according to image above.		OK		Sqiniseko Xulu - 493646	Train
10016	R	The Saloon cameras on TC2 have been adjusted according to image above.		OK		Sqiniseko Xulu - 493646	Train
10017	I	Mission Number Display		OK		Walter Sigudla - 486333	Train
10018	A	Active Cab in TC1		OK		Walter Sigudla - 486333	Train
10019	A	Login as a driver, ID: 70787878		OK		Walter Sigudla - 486333	Train
10020	A	Enter the mission 8100		OK		Walter Sigudla - 486333	Train
10021	R	Check that the TC1 and TC2 front external displays are showing the mission number 8100.		OK		Walter Sigudla - 486333	Train
10022	I	Public Announcements TC1		OK		Walter Sigudla - 486333	Train
10023	R	Read Defined Variable [TT] (MPU1)Lo_PIS_Tc1DduPaPbR1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10024	R	Read Defined Variable [TT] (MPU1)Lo_PIS_Tc1DduPaPbR2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10025	A	Pulse the switch 54S1 to the right to activate PA announcement		OK		Walter Sigudla - 486333	Train
10026	R	Green lamp 54H2 is ON		OK		Walter Sigudla - 486333	Train
10027	R	A beep sound can be heard in all saloon speakers		OK		Walter Sigudla - 486333	Train
10028	R	On Driver's screen (Home Page), PA activation message is displayed		OK		Walter Sigudla - 486333	Train
10029	A	Press the button 54S4 and hold it while talking via the microphone		OK		Walter Sigudla - 486333	Train
10030	I	It is necessary to go to each and every speaker to verify sound is coming out		OK		Walter Sigudla - 486333	Train
10031	R	Announcement can be heard in saloon speakers of TC1		OK		Walter Sigudla - 486333	Train

10032	R	Announcement can be heard in saloon speakers of M4		OK		Walter Sigudla - 486333	Train
10033	R	Announcement can be heard in saloon speakers of M1		OK		Walter Sigudla - 486333	Train
10034	R	Announcement can be heard in saloon speakers of M2		OK		Walter Sigudla - 486333	Train
10035	R	Announcement can be heard in saloon speakers of M3		OK		Walter Sigudla - 486333	Train
10036	R	Announcement can be heard in saloon speakers of TC2		OK		Walter Sigudla - 486333	Train
10037	A	Release the button 54S4		OK		Walter Sigudla - 486333	Train
10038	A	Talk on the microphone		OK		Walter Sigudla - 486333	Train
10039	R	No sound can be heard in all cars		OK		Walter Sigudla - 486333	Train
10040	A	Pulse the switch 54S1 to the right to de-activate PA announcement		OK		Walter Sigudla - 486333	Train
10041	R	Green lamp 54H2 is OFF		OK		Walter Sigudla - 486333	Train
10042	A	On the driver's screen (Image attached) select the "Public Address" virtual button. (NOTE variables below should be read immediately -they last for 2 seconds)		OK		Walter Sigudla - 486333	Train
10043	R	Read Defined Variable [TT] (MPU1)Lo_PIS_Tc1DduPaPbR1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10044	R	Read Defined Variable [TT] (MPU1)Lo_PIS_Tc1DduPaPbR2 = 1.0		OK	1	Walter Sigudla - 486333	Train
10045	R	Green lamp 54H2 is ON		OK		Walter Sigudla - 486333	Train
10046	R	PA announcement is activated		OK		Walter Sigudla - 486333	Train
10047	A	On the driver's screen (Home Page) select the "Public Address" virtual button to end communication		OK		Walter Sigudla - 486333	Train
10048	R	Read Defined Variable [TT] (MPU1)Lo_PIS_Tc1DduPaPbR1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10049	R	Read Defined Variable [TT] (MPU1)Lo_PIS_Tc1DduPaPbR2 = 0.0		OK	0	Walter Sigudla - 486333	Train

10050	R	Green lamp 54H2 is OFF		OK		Walter Sigudla - 486333	Train
10051	I	PA announcement is de-activated		OK		Walter Sigudla - 486333	Train
10052	A	Press the button 54S4 and hold it while talking on the microphone		OK		Walter Sigudla - 486333	Train
10053	R	Sound cannot be heard in all speakers		OK		Walter Sigudla - 486333	Train
10054	A	Release the button 54S4		OK		Walter Sigudla - 486333	Train
10055	A	Remove active cab on TC1		OK		Walter Sigudla - 486333	Train
10056	A	Pulse the switch 54S1 to the right to activate PA announcement		OK		Walter Sigudla - 486333	Train
10057	R	Green lamp 54H2 is OFF		OK		Walter Sigudla - 486333	Train
10058	R	No PA announcement activation showing on the Driver's screen		OK		Walter Sigudla - 486333	Train
10059	I	Cab to Cab Communication TC1		OK		Walter Sigudla - 486333	Train
10060	I	It is not necessary to have an active cab in order to initiate cab to cab communication		OK		Walter Sigudla - 486333	Train
10061	R	Read Defined Variable [TT] (MPU1)Lo_PIS_Tc1DduCabToCabPbR2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10062	R	Read Defined Variable [TT] (MPU1)Lo_PIS_Tc1DduCabToCabPbR2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10063	A	Pulse the switch 54S1 to the left to activate cab to cab communication		OK		Walter Sigudla - 486333	Train
10064	R	Green lamp 54H1 is blinking		OK		Walter Sigudla - 486333	Train
10065	R	A beep can be heard in TC2 cab		OK		Walter Sigudla - 486333	Train
10066	R	Green lamp 54H1 is blinking in TC2 cab		OK		Walter Sigudla - 486333	Train
10067	R	Cab to Cab communication is Active on DDU driver's screen		OK		Walter Sigudla - 486333	Train
10068	A	Accept Cab to cab communication request in TC2 by pulsing switch 54S1 to the left		OK		Walter Sigudla - 486333	Train

10069	R	Green lamp 54H1 is ON (steady) on TC2		OK		Walter Sigudla - 486333	Train
10070	A	Press and hold button 54S4 to initiate communication in TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10071	R	Sound can be heard on TC2 cab speakers		OK		Walter Sigudla - 486333	Train
10072	A	Press and hold button 54S4 in TC2 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10073	R	Sound can be heard on TC1 cab speakers		OK		Walter Sigudla - 486333	Train
10074	A	Pulse the switch 54S1 to the left on TC1 to de-activate cab to cab communication		OK		Walter Sigudla - 486333	Train
10075	R	Green lamp 54H1 is OFF on both TC1 and TC2		OK		Walter Sigudla - 486333	Train
10076	A	On the driver's screen (image attached) select the "Public Address" virtual button. (NOTE variables below should be read immediately -they last for 2 seconds)		OK		Walter Sigudla - 486333	Train
10077	R	Read Defined Variable [TT] (MPU1)Lo_PIS_Tc1DduCabToCabPbR1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10078	R	Read Defined Variable [TT] (MPU1)Lo_PIS_Tc1DduCabToCabPbR2 = 1.0		OK	1	Walter Sigudla - 486333	Train
10079	R	Cab-Cab is activated		OK		Walter Sigudla - 486333	Train
10080	A	On the driver's screen select the "Public Address" virtual button to end communication		OK		Walter Sigudla - 486333	Train
10081	R	Read Defined Variable [TT] (MPU1)Lo_PIS_Tc1DduCabToCabPbR2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10082	R	Read Defined Variable [TT] (MPU1)Lo_PIS_Tc1DduCabToCabPbR2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10083	R	Cab-Cab is de-activated		OK		Walter Sigudla - 486333	Train
10084	I	Cab to Cab Communication TC2		OK		Walter Sigudla - 486333	Train
10085	R	Read Defined Variable [TT]		OK	0	Walter Sigudla - 486333	Train

		(MPU1)Lo_PIS_Tc2DduCabToCabPbR1 = 0.0					
10086	R	Read Defined Variable [TT] (MPU1)Lo_PIS_Tc2DduCabToCabPbR2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10087	A	Pulse the switch 54S1 to the left to activate cab to cab communication		OK		Walter Sigudla - 486333	Train
10088	R	Green lamp 54H1 is blinking		OK		Walter Sigudla - 486333	Train
10089	R	A beep can be heard in TC1 cab		OK		Walter Sigudla - 486333	Train
10090	R	Green lamp 54H1 is blinking in TC1 cab		OK		Walter Sigudla - 486333	Train
10091	R	Cab to Cab communication is Active on DDU driver's screen		OK		Walter Sigudla - 486333	Train
10092	A	Accept Cab to cab communication request in TC1 by pulsing switch 54S1 to the left		OK		Walter Sigudla - 486333	Train
10093	R	Green lamp 54H1 is ON (steady) on TC1		OK		Walter Sigudla - 486333	Train
10094	A	Press and hold button 54S4 to initiate communication in TC2 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10095	R	Sound can be heard on TC1 cab speakers		OK		Walter Sigudla - 486333	Train
10096	A	Press and hold button 54S4 in TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10097	R	Sound can be heard on TC2 cab speakers		OK		Walter Sigudla - 486333	Train
10098	A	Pulse the switch 54S1 to the left on TC2 to de-activate cab to cab communication		OK		Walter Sigudla - 486333	Train
10099	R	Green lamp 54H1 is OFF on both TC1 and TC2		OK		Walter Sigudla - 486333	Train
10100	A	On the driver's screen (image attached) select the "Public Address" virtual button. (NOTE variables below should be read immediately -they last for 2 seconds)		OK		Walter Sigudla - 486333	Train
10101	R	Read Defined Variable [TT] (MPU1)Lo_PIS_Tc2DduCabToCabPbR1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10102	R	Read Defined Variable [TT]		OK	1	Walter Sigudla - 486333	Train

		(MPU1)Lo_PIS_Tc2DduCabToCabPbR2 = 1.0					
10103	R	Cab-Cab is activated		OK		Walter Sigudla - 486333	Train
10104	A	On the driver's screen select the "Public Address" virtual button to end communication		OK		Walter Sigudla - 486333	Train
10105	R	Read Defined Variable [TT] (MPU1)Lo_PIS_Tc2DduCabToCabPbR1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10106	R	Read Defined Variable [TT] (MPU1)Lo_PIS_Tc2DduCabToCabPbR2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10107	R	Cab-Cab is de-activated		OK		Walter Sigudla - 486333	Train
10108	I	Ventilation Rack TC1		OK		Walter Sigudla - 486333	Train
10109	A	Follow the instruction below o how to test the ventilation rack		OK		Walter Sigudla - 486333	Train
10110	R	All three fans of the ventilation rack are working		OK		Walter Sigudla - 486333	Train
10111	I	PEA Functional Test		OK		Walter Sigudla - 486333	Train
10112	I	All PEAs are normalized on Train		OK		Walter Sigudla - 486333	Train
10113	I	All doors should be closed		OK		Walter Sigudla - 486333	Train
10114	I	Lamp 44H1 is OFF		OK		Walter Sigudla - 486333	Train
10115	I	PEI auto test passed in all cars, only one green led can be seen in all PEIs		OK		Walter Sigudla - 486333	Train
10116	A	Active cab on TC1 and login as driver: 70787878		OK		Walter Sigudla - 486333	Train
10117	I	All Cameras should be working and properly adjusted		OK		Walter Sigudla - 486333	Train
10118	I	Passenger Emergency Alarm 1 (PEA 44S11) on TC1		OK		Walter Sigudla - 486333	Train
10119	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10120	R	Lamp 44H1 is ON		OK		Walter Sigudla - 486333	Train

10121	R	Read Defined Variable [TT] (MPU1)li_ubk_tc1pealoop = 1.0		OK	1	Walter Sigudla - 486333	Train
10122	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10123	R	A Beed can be heard in TC1 cab		OK		Walter Sigudla - 486333	Train
10124	R	Button lamp 54S3 is BLINKING		OK		Walter Sigudla - 486333	Train
10125	R	An emergency alarm announcement can be heard in all saloon speakers		OK		Walter Sigudla - 486333	Train
10126	R	Displays INT1 and INT2 indicate "Passenger Alarm" in all saloon cars		OK		Walter Sigudla - 486333	Train
10127	R	Lateral displays LAT1 and LAT2 indicate "Passenger Alarm" on the affected car		OK		Walter Sigudla - 486333	Train
10128	R	A CCTV footage of TC1 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10129	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10130	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10131	R	Message stops broadcasting in all saloon speakers		OK		Walter Sigudla - 486333	Train
10132	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10133	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10134	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10135	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10136	A	Reset PEA using switch 44S6		OK		Walter Sigudla - 486333	Train
10137	R	PEA is reset and a click sound can be heard while PEA returns to its normal state		OK		Walter Sigudla - 486333	Train
10138	A	Open and close doors using buttons on driver desk		OK		Walter Sigudla - 486333	Train

10139	R	All doors are closed and in blue colour on DDU		OK		Walter Sigudla - 486333	Train
10140	R	Lamp 44H1 is OFF		OK		Walter Sigudla - 486333	Train
10141	R	Read Defined Variable [TT] (MPU1)li_ubk_tc1pealoop = 0.0		OK	0	Walter Sigudla - 486333	Train
10142	R	No CCTV footage showing on Driver's screen		OK		Walter Sigudla - 486333	Train
10143	R	Button lamp 54S3 is OFF		OK		Walter Sigudla - 486333	Train
10144	R	No message on Pacis displays		OK		Walter Sigudla - 486333	Train
10145	I	Passenger Emergency Alarm 2 (PEA 44S12) on TC1		OK		Walter Sigudla - 486333	Train
10146	R	Read Defined Variable [TT] (MPU1)Lo_PIS_Tc1DduPeiCommPbR1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10147	R	Read Defined Variable [TT] (MPU1)Lo_PIS_Tc1DduPeiCommPbR2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10148	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10149	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10150	R	A CCTV footage of TC1 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10151	A	On the driver's screen (image attached) select the "Passenger Alarm" virtual button. (NOTE variables below should be read immediately -they last for 2 seconds)		OK		Walter Sigudla - 486333	Train
10152	R	Read Defined Variable [TT] (MPU1)Lo_PIS_Tc1DduPeiCommPbR1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10153	R	Read Defined Variable [TT] (MPU1)Lo_PIS_Tc1DduPeiCommPbR2 = 1.0		OK	1	Walter Sigudla - 486333	Train
10154	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train

10155	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10156	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10157	R	Communication is stabile between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10158	A	On the driver's screen select the "Passenger Alarm" virtual button to end communication		OK		Walter Sigudla - 486333	Train
10159	R	Read Defined Variable [TT] (MPU1)Lo_PIS_Tc1DduPeiCommPbR1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10160	R	Read Defined Variable [TT] (MPU1)Lo_PIS_Tc1DduPeiCommPbR2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10161	I	Passenger Emergency Alarm 3 (PEA 44S13) on TC1		OK		Walter Sigudla - 486333	Train
10162	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10163	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10164	R	A CCTV footage of TC1 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10165	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10166	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10167	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10168	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10169	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10170	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10171	I	Passenger Emergency Alarm 4 (PEA 44S14) on TC1		OK		Walter Sigudla - 486333	Train

10172	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10173	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10174	R	A CCTV footage of TC1 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10175	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10176	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10177	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10178	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10179	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10180	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10181	I	Passenger Emergency Alarm 5 (PEA 44S15) on TC1		OK		Walter Sigudla - 486333	Train
10182	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10183	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10184	R	A CCTV footage of TC1 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10185	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10186	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10187	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10188	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10189	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train

10190	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10191	I	Passenger Emergency Alarm 6 (PEA 44S16) on TC1		OK		Walter Sigudla - 486333	Train
10192	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10193	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10194	R	A CCTV footage of TC1 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10195	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10196	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10197	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10198	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10199	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10200	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10201	I	Call for Aid (CFA 54S5) on TC1		OK		Walter Sigudla - 486333	Train
10202	A	Press the SOS button 54S5		OK		Walter Sigudla - 486333	Train
10203	R	Button lamp 54S5 is ON		OK		Walter Sigudla - 486333	Train
10204	R	No sound can be heard in all saloon speakers		OK		Walter Sigudla - 486333	Train
10205	R	Displays INT1 and INT2 indicate "Call for AID" in all saloon cars		OK		Walter Sigudla - 486333	Train
10206	R	Lateral displays LAT1 and LAT2 indicate "Call for AID" on TC1		OK		Walter Sigudla - 486333	Train
10207	R	A CCTV footage of TC1 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train

10208	A	Press the button 54S3 to acknowledge SOS communication request		OK		Walter Sigudla - 486333	Train
10209	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10210	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10211	A	Respond by talking back via the PEI near 54S5		OK		Walter Sigudla - 486333	Train
10212	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10213	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10214	I	Passenger Emergency Alarm 1 (PEA 44S11) on M4		OK		Walter Sigudla - 486333	Train
10215	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10216	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10217	R	A CCTV footage of M4 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10218	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10219	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10220	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10221	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10222	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10223	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10224	I	Passenger Emergency Alarm 2 (PEA 44S12) on M4		OK		Walter Sigudla - 486333	Train
10225	A	Pull the PEA		OK		Walter Sigudla - 486333	Train

10226	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10227	R	A CCTV footage of M4 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10228	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10229	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10230	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10231	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10232	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10233	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10234	I	Passenger Emergency Alarm 3 (PEA 44S13) on M4		OK		Walter Sigudla - 486333	Train
10235	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10236	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10237	R	A CCTV footage of M4 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10238	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10239	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10240	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10241	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10242	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10243	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train

10244	I	Passenger Emergency Alarm 4 (PEA 44S14) on M4		OK		Walter Sigudla - 486333	Train
10245	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10246	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10247	R	A CCTV footage of M4 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10248	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10249	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10250	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10251	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10252	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10253	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10254	I	Passenger Emergency Alarm 5 (PEA 44S15) on M4		OK		Walter Sigudla - 486333	Train
10255	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10256	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10257	R	A CCTV footage of M4 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10258	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10259	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10260	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10261	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train

10262	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10263	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10264	I	Passenger Emergency Alarm 6 (PEA 44S16) on M4		OK		Walter Sigudla - 486333	Train
10265	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10266	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10267	R	A CCTV footage of M4 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10268	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10269	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10270	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10271	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10272	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10273	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10274	R	Read Defined Variable [TT] (MPU1)Li_UBK_M4StateResetPea = 1.0		OK	1	Walter Sigudla - 486333	Train
10275	A	Reset PEA using switch 44S6		OK		Walter Sigudla - 486333	Train
10276	R	Read Defined Variable [TT] (MPU1)Li_UBK_M4StateResetPea = 0.0		OK	0	Walter Sigudla - 486333	Train
10277	R	All M4 PEAs are reset		OK		Walter Sigudla - 486333	Train
10278	I	Passenger Emergency Alarm 1 (PEA 44S11) on M1		OK		Walter Sigudla - 486333	Train
10279	A	Pull the PEA		OK		Walter Sigudla - 486333	Train

10280	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10281	R	A CCTV footage of M1 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10282	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10283	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10284	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10285	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10286	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10287	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10288	I	Passenger Emergency Alarm 2 (PEA 44S12) on M1		OK		Walter Sigudla - 486333	Train
10289	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10290	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10291	R	A CCTV footage of M1 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10292	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10293	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10294	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10295	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10296	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10297	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train

10298	I	Passenger Emergency Alarm 3 (PEA 44S13) on M1		OK		Walter Sigudla - 486333	Train
10299	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10300	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10301	R	A CCTV footage of M1 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10302	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10303	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10304	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10305	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10306	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10307	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10308	I	Passenger Emergency Alarm 4 (PEA 44S14) on M1		OK		Walter Sigudla - 486333	Train
10309	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10310	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10311	R	A CCTV footage of M1 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10312	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10313	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10314	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10315	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train

10316	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10317	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10318	I	Passenger Emergency Alarm 5 (PEA 44S15) on M1		OK		Walter Sigudla - 486333	Train
10319	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10320	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10321	R	A CCTV footage of M1 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10322	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10323	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10324	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10325	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10326	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10327	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10328	I	Passenger Emergency Alarm 6 (PEA 44S16) on M1		OK		Walter Sigudla - 486333	Train
10329	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10330	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10331	R	A CCTV footage of M1 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10332	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10333	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train

10334	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10335	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10336	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10337	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10338	R	Read Defined Variable [TT] (MPU1)Li_UBK_M1StateResetPea = 1.0		OK	1	Walter Sigudla - 486333	Train
10339	A	Reset PEA using switch 44S6		OK		Walter Sigudla - 486333	Train
10340	R	Read Defined Variable [TT] (MPU1)Li_UBK_M1StateResetPea = 0.0		OK	0	Walter Sigudla - 486333	Train
10341	R	All M1 PEAs are reset		OK		Walter Sigudla - 486333	Train
10342	I	Passenger Emergency Alarm 1 (PEA 44S11) on M2		OK		Walter Sigudla - 486333	Train
10343	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10344	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10345	R	A CCTV footage of M2 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10346	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10347	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10348	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10349	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10350	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10351	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train

10352	I	Passenger Emergency Alarm 2 (PEA 44S12) on M2		OK		Walter Sigudla - 486333	Train
10353	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10354	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10355	R	A CCTV footage of M2 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10356	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10357	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10358	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10359	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10360	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10361	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10362	I	Passenger Emergency Alarm 3 (PEA 44S13) on M2		OK		Walter Sigudla - 486333	Train
10363	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10364	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10365	R	A CCTV footage of M2 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10366	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10367	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10368	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10369	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train

10370	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10371	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10372	I	Passenger Emergency Alarm 4 (PEA 44S14) on M2		OK		Walter Sigudla - 486333	Train
10373	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10374	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10375	R	A CCTV footage of M2 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10376	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10377	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10378	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10379	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10380	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10381	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10382	I	Passenger Emergency Alarm 5 (PEA 44S15) on M2		OK		Walter Sigudla - 486333	Train
10383	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10384	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10385	R	A CCTV footage of M2 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10386	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10387	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train

10388	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10389	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10390	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10391	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10392	I	Passenger Emergency Alarm 6 (PEA 44S16) on M2		OK		Walter Sigudla - 486333	Train
10393	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10394	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10395	R	A CCTV footage of M2 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10396	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10397	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10398	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10399	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10400	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10401	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10402	R	Read Defined Variable [TT] (MPU1)Li_UBK_M2StateResetPea = 1.0		OK	1	Walter Sigudla - 486333	Train
10403	A	Reset PEA using switch 44S6		OK		Walter Sigudla - 486333	Train
10404	R	Read Defined Variable [TT] (MPU1)Li_UBK_M2StateResetPea = 0.0		OK	0	Walter Sigudla - 486333	Train
10405	R	All M2 PEAs are reset		OK		Walter Sigudla - 486333	Train

10406	I	Passenger Emergency Alarm 1 (PEA 44S11) on M3		OK		Walter Sigudla - 486333	Train
10407	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10408	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10409	R	A CCTV footage of M3 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10410	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10411	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10412	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10413	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10414	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10415	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10416	I	Passenger Emergency Alarm 2 (PEA 44S12) on M3		OK		Walter Sigudla - 486333	Train
10417	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10418	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10419	R	A CCTV footage of M3 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10420	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10421	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10422	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10423	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train

10424	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10425	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10426	I	Passenger Emergency Alarm 3 (PEA 44S13) on M3		OK		Walter Sigudla - 486333	Train
10427	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10428	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10429	R	A CCTV footage of M3 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10430	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10431	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10432	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10433	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10434	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10435	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10436	I	Passenger Emergency Alarm 4 (PEA 44S14) on M3		OK		Walter Sigudla - 486333	Train
10437	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10438	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10439	R	A CCTV footage of M3 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10440	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10441	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train

10442	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10443	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10444	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10445	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10446	I	Passenger Emergency Alarm 5 (PEA 44S15) on M3		OK		Walter Sigudla - 486333	Train
10447	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10448	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10449	R	A CCTV footage of M3 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10450	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10451	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10452	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10453	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10454	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10455	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10456	I	Passenger Emergency Alarm 6 (PEA 44S16) on M3		OK		Walter Sigudla - 486333	Train
10457	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10458	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10459	R	A CCTV footage of M3 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train

10460	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10461	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10462	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10463	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10464	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10465	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10466	R	Read Defined Variable [TT] (MPU1)Li_UBK_M3StateResetPea = 1.0		OK	1	Walter Sigudla - 486333	Train
10467	A	Reset PEA using switch 44S6		OK		Walter Sigudla - 486333	Train
10468	R	Read Defined Variable [TT] (MPU1)Li_UBK_M3StateResetPea = 0.0		OK	0	Walter Sigudla - 486333	Train
10469	R	All M3 PEAs are reset		OK		Walter Sigudla - 486333	Train
10470	I	Passenger Emergency Alarm 1 (PEA 44S11) on TC2		OK		Walter Sigudla - 486333	Train
10471	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10472	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10473	R	A CCTV footage of TC2 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10474	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10475	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10476	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10477	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train

10478	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10479	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10480	I	Passenger Emergency Alarm 2 (PEA 44S12) on TC2		OK		Walter Sigudla - 486333	Train
10481	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10482	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10483	R	A CCTV footage of TC2 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10484	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10485	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10486	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10487	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10488	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10489	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10490	I	Passenger Emergency Alarm 3 (PEA 44S13) on TC2		OK		Walter Sigudla - 486333	Train
10491	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10492	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10493	R	A CCTV footage of TC2 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10494	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10495	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train

10496	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10497	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10498	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10499	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10500	I	Passenger Emergency Alarm 4 (PEA 44S14) on TC2		OK		Walter Sigudla - 486333	Train
10501	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10502	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10503	R	A CCTV footage of TC2 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10504	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10505	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10506	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10507	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10508	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10509	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10510	I	Passenger Emergency Alarm 5 (PEA 44S15) on TC2		OK		Walter Sigudla - 486333	Train
10511	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10512	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10513	R	A CCTV footage of TC2 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train

10514	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10515	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10516	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10517	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10518	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10519	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10520	I	Passenger Emergency Alarm 6 (PEA 44S16) on TC2		OK		Walter Sigudla - 486333	Train
10521	A	Pull the PEA		OK		Walter Sigudla - 486333	Train
10522	R	"Wait/Talk" lamp is BLINKING ORANGE on PEI		OK		Walter Sigudla - 486333	Train
10523	R	A CCTV footage of TC2 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10524	A	Press the button 54S3 to acknowledge PEA communication request		OK		Walter Sigudla - 486333	Train
10525	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10526	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10527	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10528	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10529	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10530	I	Call for Aid (CFA 54S5) on TC2		OK		Walter Sigudla - 486333	Train
10531	A	Press the SOS button 54S5		OK		Walter Sigudla - 486333	Train
10532	R	Button lamp 54S5 is ON		OK		Walter Sigudla - 486333	Train

10533	R	No sound can be heard in all saloon speakers		OK		Walter Sigudla - 486333	Train
10534	R	Displays INT1 and INT2 indicate "Call for AID" in all saloon cars		OK		Walter Sigudla - 486333	Train
10535	R	Lateral displays LAT1 and LAT2 indicate "Call for AID" on TC2		OK		Walter Sigudla - 486333	Train
10536	R	A CCTV footage of TC2 camera 1 and 2 can be seen on the Driver's screen		OK		Walter Sigudla - 486333	Train
10537	A	Press the button 54S3 to acknowledge SOS communication request		OK		Walter Sigudla - 486333	Train
10538	A	Press and hold button 54S4 on TC1 and talk on the microphone		OK		Walter Sigudla - 486333	Train
10539	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10540	A	Respond by talking back via the PEI near 54S5		OK		Walter Sigudla - 486333	Train
10541	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10542	A	Press the button 54S3 to end PEA communication		OK		Walter Sigudla - 486333	Train
10543	A	Open and close doors left and right doors		OK		Walter Sigudla - 486333	Train
10544	R	All doors are closed and in blue colour on DDU		OK		Walter Sigudla - 486333	Train
10545	I	PEAs functional Test from TC2 cab		OK		Walter Sigudla - 486333	Train
10546	I	This is a quick test to verify that all PEAs work and can be reset from TC2		OK		Walter Sigudla - 486333	Train
10547	A	Insert Driver's Key and turn to ON position		OK		Walter Sigudla - 486333	Train
10548	A	Login as Driver using the code 70787878		OK		Walter Sigudla - 486333	Train
10549	R	Read Defined Variable [TT] (MPU1)li_dor_tc2alldoorsclosedr1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10550	R			OK		Walter Sigudla - 486333	Train

10551	A	Pull all the PEAs on Train		OK		Walter Sigudla - 486333	Train
10552	R			OK		Walter Sigudla - 486333	Train
10553	R	Read Defined Variable [TT] (MPU1)li_dor_tc2alldoorsclosedr1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10554	R			OK		Walter Sigudla - 486333	Train
10555	A	Press the button 54S3 to acknowledge PEA communication request, continue to press the button until all but one PEAs have been acknowledged.		OK		Walter Sigudla - 486333	Train
10556	R	Lamp 44H1 is ON		OK		Walter Sigudla - 486333	Train
10557	R	Read Defined Variable [TT] (MPU1)li_ubk_tc2pealoop = 1.0		OK	1	Walter Sigudla - 486333	Train
10558	A	Press and hold the button 54S4 while talking on the microphone		OK		Walter Sigudla - 486333	Train
10559	R	The person in the cabin can be heard from the PEI speaker		OK		Walter Sigudla - 486333	Train
10560	I	It is not necessary to perform step below for all PEAs, one PEA is sufficient		OK		Walter Sigudla - 486333	Train
10561	A	Respond by talking back via the PEI		OK		Walter Sigudla - 486333	Train
10562	R	Communication is established between PEI and Driver cab		OK		Walter Sigudla - 486333	Train
10563	A	Reset all PEAs at using switch 44S6		OK		Walter Sigudla - 486333	Train
10564	R	All PEAs are reset, and a click sound can be heard while PEA returns to its normal state		OK		Walter Sigudla - 486333	Train
10565	A	Open and close doors left and right doors		OK		Walter Sigudla - 486333	Train
10566	R	All doors are closed and in blue colour on DDU		OK		Walter Sigudla - 486333	Train
10567	R	Lamp 44H1 is OFF		OK		Walter Sigudla - 486333	Train
10568	R	No message on Pacis displays		OK		Walter Sigudla - 486333	Train
10569	R	Read Defined Variable [TT] (MPU1)li_ubk_tc2pealoop = 0.0		OK	0	Walter Sigudla - 486333	Train

10570	R	No CCTV footage showing on Driver's screen		OK		Walter Sigudla - 486333	Train
10571	A	On the Event screen, check that there are no IOS related to doors or PEAs recorded		OK		Walter Sigudla - 486333	Train
10572	R	After test is completed, the DDU PEA screen should be as shown		OK		Walter Sigudla - 486333	Train
10573	A	Repeat this test for 4 times		OK		Walter Sigudla - 486333	Train
10574	R	1st attempt passed		OK		Walter Sigudla - 486333	Train
10575	R	2nd attempt passed		OK		Walter Sigudla - 486333	Train
10576	R	3rd attempt passed		OK		Walter Sigudla - 486333	Train
10577	R	4th attempt passed		OK		Walter Sigudla - 486333	Train
10578	I	Public Announcements TC2		OK		Walter Sigudla - 486333	Train
10579	R	Read Defined Variable [TT] (MPU1)Lo_PIS_Tc2DduPaPbR1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10580	R	Read Defined Variable [TT] (MPU1)Lo_PIS_Tc2DduPaPbR2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10581	A	Pulse the switch 54S1 to the right to activate PA announcement		OK		Walter Sigudla - 486333	Train
10582	R	Green lamp 54H2 is ON		OK		Walter Sigudla - 486333	Train
10583	R	A beep sound can be heard in all saloon speakers		OK		Walter Sigudla - 486333	Train
10584	R	On Driver's screen (Home Page), PA activation message is displayed		OK		Walter Sigudla - 486333	Train
10585	A	Press the button 54S4 and hold it while talking via the microphone		OK		Walter Sigudla - 486333	Train
10586	R	Announcement can be heard in saloon speakers of all cars		OK		Walter Sigudla - 486333	Train
10587	A	Release the button 54S4		OK		Walter Sigudla - 486333	Train
10588	A	Talk on the microphone		OK		Walter Sigudla - 486333	Train
10589	R	No sound can be heard in all cars		OK		Walter Sigudla - 486333	Train

10590	A	Pulse the switch 54S1 to the right to de-activate PA announcement		OK		Walter Sigudla - 486333	Train
10591	A	Green lamp 54H2 is OFF		OK		Walter Sigudla - 486333	Train
10592	A	On the driver's screen (Image above) select the "Public Address" virtual button. (NOTE variables below should be read immediately -they last for 2 seconds)		OK		Walter Sigudla - 486333	Train
10593	R	Read Defined Variable [TT] (MPU1)Lo_PIS_Tc2DduPaPbR1 = 1.0		OK	1	Walter Sigudla - 486333	Train
10594	R	Read Defined Variable [TT] (MPU1)Lo_PIS_Tc2DduPaPbR2 = 1.0		OK	1	Walter Sigudla - 486333	Train
10595	R	Green lamp 54H2 is ON		OK		Walter Sigudla - 486333	Train
10596	R	PA announcement is activated		OK		Walter Sigudla - 486333	Train
10597	A	On the driver's screen (Home Page) select the "Public Address" virtual button to end communication		OK		Walter Sigudla - 486333	Train
10598	R	Read Defined Variable [TT] (MPU1)Lo_PIS_Tc2DduPaPbR1 = 0.0		OK	0	Walter Sigudla - 486333	Train
10599	R	Read Defined Variable [TT] (MPU1)Lo_PIS_Tc2DduPaPbR2 = 0.0		OK	0	Walter Sigudla - 486333	Train
10600	R	Green lamp 54H2 is OFF		OK		Walter Sigudla - 486333	Train
10601	I	PA announcement is de-activated		OK		Walter Sigudla - 486333	Train
10602	A	Press the button 54S4 and hold it while talking on the microphone		OK		Walter Sigudla - 486333	Train
10603	R	Sound cannot be heard in all speakers		OK		Walter Sigudla - 486333	Train
10604	A	Release the button 54S4		OK		Walter Sigudla - 486333	Train
10605	A	Remove active cab on TC1		OK		Walter Sigudla - 486333	Train
10606	A	Pulse the switch 54S1 to the right to activate PA announcement		OK		Walter Sigudla - 486333	Train
10607	R	Green lamp 54H2 is OFF		OK		Walter Sigudla - 486333	Train
10608	R	No PA announcement activation showing on the Driver's screen		OK		Walter Sigudla - 486333	Train

10609	I	Ventilation Rack TC2		OK		Walter Sigudla - 486333	Train
10610	A	Follow the instruction below o how to test the ventilation rack		OK		Walter Sigudla - 486333	Train
10611	R	All three fans of the ventilation rack are working		OK		Walter Sigudla - 486333	Train
10612	I	Pacis audio and displays test		OK		Walter Sigudla - 486333	Train
10613	I	This test is aimed at verifying that the Pacis system is working. This includes displays (all LEDs must be working in each display) and speakers		OK		Walter Sigudla - 486333	Train
10614	A	Launch the Pacis Test from the DDU		OK		Walter Sigudla - 486333	Train
10615	R	All saloon speakers and displays are working on train		OK		Walter Sigudla - 486333	Train
10616	A	Stop the Pacis test		OK		Walter Sigudla - 486333	Train
10617	I	End of Test		OK		Walter Sigudla - 486333	Train

Section 29 – Dynamic Pre-Test

29.3 Instructions list

29.3.1 Pre-DT-Pre-Test

I - Information A - Action R - Result NE - Not Executed

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	Dynamic Pre-Test		OK		Walter Sigudla - 486333	Train
10002	I	Train Normalisation		OK		Walter Sigudla - 486333	Train
10003	A	Whilst checking the LV cubicles in each Car, also check the dataplug ground cables if they are secured and tightened		OK		Walter Sigudla - 486333	Train
10004	I	TC1		OK		Walter Sigudla - 486333	Train
10005	R	ALL LV1.1 connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10006	R	ALL LV2.1 connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10007	R	ALL LV7 connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10008	R	ALL HVAC Cubicle connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10009	R	ALL underframe connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10010	R	ALL inter-car connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10011	A	Take note of the sensor grades captured on HVAC web portal for TC1 and compare them with the ones on the HVAC name plate (ceiling) of Tc1		OK		Walter Sigudla - 486333	Train
10012	R	The values of the HVAC sensor grades are the same		OK		Walter Sigudla - 486333	Train
10013	I	M4		OK		Walter Sigudla - 486333	Train
10014	R	ALL LV3 connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10015	R	ALL LV6 connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train

10016	R	ALL HVAC Cubicle connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10017	R	ALL underframe connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10018	R	ALL inter-car connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10019	A	Take note of the sensor grades captured on HVAC web portal for M4 and compare them with the ones on the HVAC name plate (ceiling) of M4		OK		Walter Sigudla - 486333	Train
10020	R	The values of the HVAC sensor grades are the same		OK		Walter Sigudla - 486333	Train
10021	I	M1		OK		Walter Sigudla - 486333	Train
10022	R	ALL LV3 connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10023	R	ALL LV6 connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10024	R	ALL HVAC Cubicle connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10025	R	ALL underframe connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10026	R	ALL inter-car connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10027	A	Take note of the sensor grades captured on HVAC web portal for M1 and compare them with the ones on the HVAC name plate (ceiling) of M1		OK		Walter Sigudla - 486333	Train
10028	R	The values of the HVAC sensor grades are the same		OK		Walter Sigudla - 486333	Train
10029	I	M2		OK		Walter Sigudla - 486333	Train
10030	R	ALL LV3 connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10031	R	ALL LV4 connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train

10032	R	ALL HVAC Cubicle connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10033	R	ALL underframe connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10034	R	ALL inter-car connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10035	A	Take note of the sensor grades captured on HVAC web portal for M2 and compare them with the ones on the HVAC name plate (ceiling) of M2		OK		Walter Sigudla - 486333	Train
10036	R	The values of the HVAC sensor grades are the same		OK		Walter Sigudla - 486333	Train
10037	I	M3		OK		Walter Sigudla - 486333	Train
10038	R	ALL LV3 connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10039	R	ALL LV6 connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10040	R	ALL HVAC Cubicle connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10041	R	ALL underframe connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10042	R	ALL inter-car connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10043	A	Take note of the sensor grades captured on HVAC web portal for M3 and compare them with the ones on the HVAC name plate (ceiling) of M3		OK		Walter Sigudla - 486333	Train
10044	R	The values of the HVAC sensor grades are the same		OK		Walter Sigudla - 486333	Train
10045	I	TC2		OK		Walter Sigudla - 486333	Train
10046	R	ALL LV1.2 connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10047	R	ALL LV2.2 connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train

10048	R	ALL LV7 connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10049	R	ALL HVAC Cubicle connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10050	R	ALL underframe connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10051	R	ALL inter-car connectors are connected and tightly secured with screws		OK		Walter Sigudla - 486333	Train
10052	A	Take note of the sensor grades captured on HVAC web portal for TC2 and compare them with the ones on the HVAC name plate (ceiling) of TC2		OK		Walter Sigudla - 486333	Train
10053	R	The values of the HVAC sensor grades are the same		OK		Walter Sigudla - 486333	Train
10054	I	Brake Test		OK		Walter Sigudla - 486333	Train
10055	A	Prepare the train in high voltage with active cab on TC1		OK		Alleta Sekgololo - 417407	Train
10056	A	On the DDU test screen, run the BRAKE TEST by following the instructions on the screen		OK		Alleta Sekgololo - 417407	Train
10057	R	After the BRAKE TEST is complete, all cars have passed		OK		Alleta Sekgololo - 417407	Train
10058	A	Shut down the train by putting the battery contactor 18S1 in OFF position		OK		Alleta Sekgololo - 417407	Train
10059	I	Reduced Power Test		OK		Alleta Sekgololo - 417407	Train
10060	A	Prepare the train in high voltage with active cab on TC1		OK		Alleta Sekgololo - 417407	Train
10061	A	Set the Driving Mode Switch (30S1) to "DEPOT" position.		OK		Alleta Sekgololo - 417407	Train
10062	A	Select the Reduced Power test on the DDU. (select one of the HV devices on the Home screen and access the Reduced Power Test)		OK		Alleta Sekgololo - 417407	Train
10063	A	Select a running direction (Forward or Reverse).		OK		Alleta Sekgololo - 417407	Train

10064	I	REMEMBER TO PRESS THE DEAD MAN BUTTON OCCASIONALLY		OK		Alleta Sekgololo - 417407	Train
10065	R	Check that all the conditions on the screen are satisfied (green box to the right of each condition)		OK		Alleta Sekgololo - 417407	Train
10066	A	Select RPT for M4 car		OK		Alleta Sekgololo - 417407	Train
10067	R	RPT for M4 test successful		OK		Alleta Sekgololo - 417407	Train
10068	A	Close the HSCB		OK		Alleta Sekgololo - 417407	Train
10069	A	Select RPT for M1car		OK		Alleta Sekgololo - 417407	Train
10070	R	RPT for M1 test successful		OK		Alleta Sekgololo - 417407	Train
10071	A	Close the HSCB		OK		Alleta Sekgololo - 417407	Train
10072	A	Select RPT for M2 car		OK		Alleta Sekgololo - 417407	Train
10073	R	RPT for M2 test successful		OK		Alleta Sekgololo - 417407	Train
10074	A	Close the HSCB		OK		Alleta Sekgololo - 417407	Train
10075	A	Select RPT for M3 car		OK		Alleta Sekgololo - 417407	Train
10076	R	RPT for M3 test successful		OK		Alleta Sekgololo - 417407	Train
10077	A	Close the HSCB		OK		Alleta Sekgololo - 417407	Train
10078	I	Traction Test		OK		Alleta Sekgololo - 417407	Train
10079	A	WARNING: Do not perform TRACTION TEST when the Reduced Power Test has failed.		OK		Alleta Sekgololo - 417407	Train
10080	A	Prepare the train in high voltage with active cab on TC1		OK		Alleta Sekgololo - 417407	Train
10081	A	On the DDU Test Screen, press the virtual button TRACTION TEST and ensure that all the requirements are met to execute the test.		OK		Alleta Sekgololo - 417407	Train
10082	R	After the Traction Test is complete, there are no traction faults logged on the DDU Event screen		OK		Alleta Sekgololo - 417407	Train

10083	I	Load requirements		OK		Alleta Sekgololo - 417407	Train
10084	R	Read Undefined Variable [TT] SBK_M1CarWeight		OK	35991	Alleta Sekgololo - 417407	Train
10085	R	Read Undefined Variable [TT] SBK_M2CarWeight		OK	36425	Alleta Sekgololo - 417407	Train
10086	R	Read Undefined Variable [TT] SBK_M3CarWeight		OK	36307	Alleta Sekgololo - 417407	Train
10087	R	Read Undefined Variable [TT] SBK_M4CarWeight		OK	36618	Alleta Sekgololo - 417407	Train
10088	R	Read Undefined Variable [TT] SBK_Tc1CarWeight		OK	32716	Alleta Sekgololo - 417407	Train
10089	R	Read Undefined Variable [TT] SBK_Tc2CarWeight		OK	34421	Alleta Sekgololo - 417407	Train
10090	A	Calculate the sum of all cars		OK		Alleta Sekgololo - 417407	Train
10091	R	The sum of the weight for all cars Result Max : x <= 223740 (kg)		OK	212478	Alleta Sekgololo - 417407	Train
10092	I	End of Test		OK		Alleta Sekgololo - 417407	Train

Section 30 – Report summaries

30.2 Results status

Test Instruction Sheet	Compliant	Incomplete	Non-compliant
Train Ground Communication	X		
Traction Interlock	X		
Traction Converter	X		
Service Brake	X		
Rescue Mode and Emergency Disconnection	X		
Passenger Doors	X		
Pantograph	X		
PACIS	X		
On-board train data recorder	X		
Monitoring Circuit Breakers	X		
Main Circuit Breaker Control	X		
Internal Lighting	X		
HVAC Air Conditioning	X		
Holding and Parking Brake	X		
High Voltage Distribution	X		
Fire Detection	X		
External lights and Signalling	X		
ERTMS	X		
Energy Distribution 400V AC	X		
Energy Distribution 110V	X		
Emergency Brake Interlock	X		
Dynamic Pre-Test	X		
Driving Command	X		
Deadman	X		
Computer Network and DDU Screen	X		

CCTV Video Information	X		
Cabin Control	X		
Air Production	X		

Vehicle	Equipment	Expected version	Version loaded
Train			