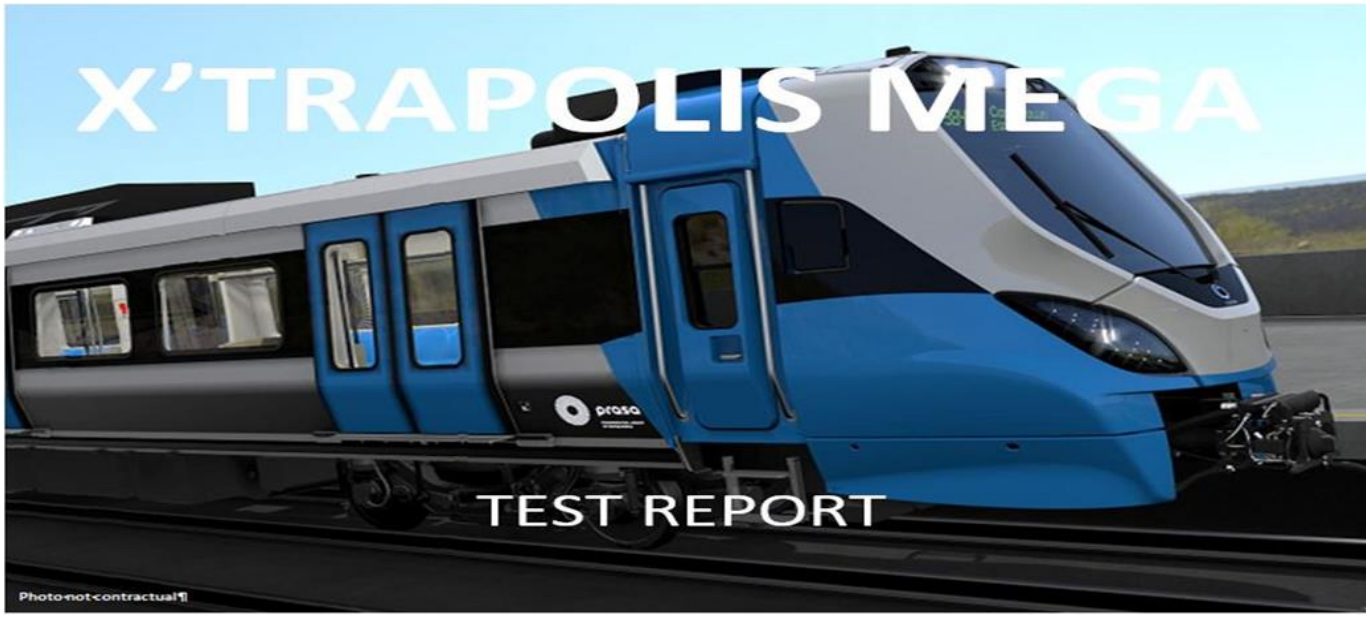
PROJECT	CUSTOMER	TRAIN
Xtrapolis-PRASA	**PRASA**	**234 – ACT**

RTR Acceptance Test on Customer Track TS234 Report

GIB0000006949



	CREATED	VERIFIED	APPROVED	DISTRIBUTION
Name	Neliswa MABUNDA	Sifiso LUKHELE	Kgomotso NKOANA	Confidentiality Category *Restricted* ☐ *Project* ☐ *Normal* ☑
Date	01/08/2024	01/08/2024	01/08/2024	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	01/08/2024	Creation	Neliswa MABUNDA

Internal validations

	Name	Function	Date	Signature
Creator	Neliswa MABUNDA	EPU Manager	01/08/2024	X Neliswa MABUNDA EPU Manager
Verifier	Sifiso LUKHELE	Serial Test Manager	01/08/2024	X Sifiso LUKHELE Serial Test Manager
Approver	Kgomotso NKOANA	Test Expert	01/08/2024	X Kgomotso NKOANA Test Expert
Approver	Khehla VEZI	PRASA Validation	01/08/2024	X Khehla VEZI PRASA Validation

Execution Plan

Start Date	25/07/2024
End Date	25/07/2024

Contents

Section 1 – Purpose / Objectives

Section 3 – Acceptance Test

3.2 Description of the tests, characteristics to be measured, observed

3.1 Instructions list

3.1.1 ACT-Acceptance Test

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

N°	Type	Instruction	Result status	Result value	Operator
10001	I	Customer Acceptance Test	OK		Sekwati Ramonyai - 417416
10002	I	Static Tests	OK		Sekwati Ramonyai - 417416
10003	I	Automatic Train Preparation TC1	OK		Sekwati Ramonyai - 417416
10004	I	Train should be OFF	OK		Sekwati Ramonyai - 417416
10005	I	Backup Mode switch 27S1 should be in NORMAL position	OK		Sekwati Ramonyai - 417416
10006	A	Turn the Driver's Master Key to ON position	OK		Sekwati Ramonyai - 417416
10007	A	Close the battery contactor 18S1	OK		Sekwati Ramonyai - 417416
10008	R	After few minutes, the train is LV ready with TCMS available	OK		Sekwati Ramonyai - 417416
10009	R	The battery voltage is 110V on the line voltage indicator	OK		Sekwati Ramonyai - 417416
10010	A	Login on the ERTMS Screen as using the Driver's code 70787878	OK		Sekwati Ramonyai - 417416
10011	A	Enter the Train number	OK		Sekwati Ramonyai - 417416
10012	A	Launch the mission 8100 for Pretoria	OK		Sekwati Ramonyai - 417416
10013	R	The Train number and mission are displayed on the DDU screen	OK		Sekwati Ramonyai - 417416
10014	A	Press the automatic start button 20S1 or the virtual button on the DDU screen	OK		Sekwati Ramonyai - 417416
10015	R	The automatic start button 20S1 is flashing during the train preparartion	OK		Sekwati Ramonyai - 417416
10016	R	On DDU screen, both pantographs are raised	OK		Sekwati Ramonyai - 417416
10017	R	Verify that both pantographs are raised when looking outside the train	OK		Sekwati Ramonyai - 417416

10018	R	On the Driver's desk, the button lamp of 21S1 is ON	OK		Sekwati Ramonyai - 417416
10019	R	On DDU screen, both HSCBs are closed	OK		Sekwati Ramonyai - 417416
10020	R	On the Driver's desk, the button lamp of HSCB closed 22S11 is ON	OK		Sekwati Ramonyai - 417416
10021	R	The automatic start button 20S1 stays ON after train preparation is complete	OK		Sekwati Ramonyai - 417416
10022	I	Train is in Prepared state	OK		Sekwati Ramonyai - 417416
10023	R	Check the line voltage on the Line voltage indicator and verify on the DDu screen that the value is more or less the same	OK		Sekwati Ramonyai - 417416
10024	R	Line Voltage Result Min : 2700<= x (V)	OK	3200	Sekwati Ramonyai - 417416
10025	A	Check the pressure indicator on the pneumatic gauge are correctly set	OK		Sekwati Ramonyai - 417416
10026	R	The indicator for the Main pipe is Red and the brake pipe is Yellow	OK		Sekwati Ramonyai - 417416
10027	R	Note the distance travelled by the train on the DDU screen Read Undefined Value : x (km)	OK	26	Sekwati Ramonyai - 417416
10028	I	Train Status	OK		Sekwati Ramonyai - 417416
10029	R	Check on the DDU screen that at least one type of brake is applied in all cars (Holding Brake, Emergency Brake or Parking Brake)	OK		Sekwati Ramonyai - 417416
10030	R	Train is on standstill	OK		Sekwati Ramonyai - 417416
10031	A	Check the Events screen on the DDU	OK		Sekwati Ramonyai - 417416
10032	R	No faults have been logged on the events list	OK		Sekwati Ramonyai - 417416
10033	I	If there are any events listed on the DDU screen, please verify that they are not critical events which can compromise the safety perfomances of the train. If not, create an event on TES for the events listed on the train for further investigation	OK		Sekwati Ramonyai - 417416
10034	I	Quality Inspection	OK		Sekwati Ramonyai - 417416
10035	I	Outside Train	OK		Sekwati Ramonyai - 417416

10036	A	Take a walk around the train and verify if there is not any abnormal noise that can be heard and also verify if all equipment are correctly mounted & normalized e.g. Speed sensors, connectors, normalization of test point covers for air.	OK		Sekwati Ramonyai - 417416
10037	R	No abnormal noise or equipments which are not correctly mounted	OK		Sekwati Ramonyai - 417416
10038	R	All underframe connectors are connected and tightly secured with screws	OK		Sekwati Ramonyai - 417416
10039	R	All exterior pacis displays are working	OK		Sekwati Ramonyai - 417416
10040	I	Inside Train	OK		Sekwati Ramonyai - 417416
10041	A	Check both MCE's in LV 2 if they are normalized.	OK		Sekwati Ramonyai - 417416
10042	R	Both MCE's are normalized.	OK		Sekwati Ramonyai - 417416
10043	A	Talk a walk inside the train and verify the correct operation of all subsystems	OK		Sekwati Ramonyai - 417416
10044	R	All internal pacis displays are working and the mission can be seen on the display	OK		Sekwati Ramonyai - 417416
10045	R	Internal lights are ON in all cars in 100% brightness, all LEDs are working in each light panel	OK		Sekwati Ramonyai - 417416
10046	R	There is no component with defect inside the train	OK		Sekwati Ramonyai - 417416
10047	A	RESET ERTMS Novrams.	OK		Sekwati Ramonyai - 417416
10048	R	ERTMS NOVRAMS reset is successful.	OK		Sekwati Ramonyai - 417416
10049	I	If anything is noted during the train walk, please create an Event on TES for all defects for further investigation	OK		Sekwati Ramonyai - 417416
10050	I	HVAC System	OK		Sekwati Ramonyai - 417416
10051	A	Launch the HVAC auto-test for all cars one by one on the DDU screen	OK		Sekwati Ramonyai - 417416
10052	R	The HVAC is cooling,Ventilating and Heating in all cars including the Cabin	OK		Sekwati Ramonyai - 417416
10053	R	No faults are reported on the DDU event's list from the HVAC system	OK		Sekwati Ramonyai - 417416

10054	I	Doors command TC1	OK		Sekwati Ramonyai - 417416
10055	I	Door status on DDU screen	OK		Sekwati Ramonyai - 417416
10056	A	Put the Door Auth Switch 50S7 in DRIVER position	OK		Sekwati Ramonyai - 417416
10057	A	Put the switch 30S1 in Depot Driving mode	OK		Sekwati Ramonyai - 417416
10058	R	All doors are closed and indicated in BLUE color on the DDU screen	OK		Sekwati Ramonyai - 417416
10059	A	Press the DOOR AUTH left button 50S5	OK		Sekwati Ramonyai - 417416
10060	A	Press the DOOR OPEN left button 50S1	OK		Sekwati Ramonyai - 417416
10061	A	Press the DOOR AUTH right button 50S6	OK		Sekwati Ramonyai - 417416
10062	A	Press the DOOR OPEN right button 50S2	OK		Sekwati Ramonyai - 417416
10063	R	All doors are open and indicated in WHITE color on the DDU screen	OK		Sekwati Ramonyai - 417416
10064	A	Walk around the train to verify that all doors are physically open	OK		Sekwati Ramonyai - 417416
10065	R	All doors are open	OK		Sekwati Ramonyai - 417416
10066	A	Press the DOOR CLOSE left button 50S3	OK		Sekwati Ramonyai - 417416
10067	A	Press the DOOR CLOSE right button 50S4	OK		Sekwati Ramonyai - 417416
10068	R	All doors are closed and indicated in BLUE color on the DDU screen	OK		Sekwati Ramonyai - 417416
10069	A	Walk around the train to verify that all doors are physically closed	OK		Sekwati Ramonyai - 417416
10070	R	All doors are closed	OK		Sekwati Ramonyai - 417416
10071	I	External Lighting and Signalling TC1	OK		Sekwati Ramonyai - 417416
10072	I	The light status should be verified in both TC cars (front and back) in each case	OK		Sekwati Ramonyai - 417416
10073	R	Check white light 70H11 is ON (TC1 car).	OK		Sekwati Ramonyai - 417416
10074	R	Check red light 70H11 is OFF. Left side of the car (TC1 car).	OK		Sekwati Ramonyai - 417416

10075	R	Check white lights 70H5 and 70H6 are ON (TC1 car).	OK		Sekwati Ramonyai - 417416
10076	R	Check red lights 70H7 and 70H9 are OFF (TC1 car).	OK		Sekwati Ramonyai - 417416
10077	R	Check white light 70H11 is OFF (TC2 car).	OK		Sekwati Ramonyai - 417416
10078	R	Check red light 70H11 is ON. Left side of the car (TC2 car).	OK		Sekwati Ramonyai - 417416
10079	R	Check white lights 70H5 and 70H6 are OFF (TC2 car).	OK		Sekwati Ramonyai - 417416
10080	R	Check red lights 70H7 and 70H9 are ON (TC2 car).	OK		Sekwati Ramonyai - 417416
10081	R	Check Headlights 70H3 and 70H4 are OFF (TC2 car).	OK		Sekwati Ramonyai - 417416
10082	A	Press button 70S2 to activate Bright Headlight	OK		Sekwati Ramonyai - 417416
10083	R	White light 70H3 and 70H4 are in bright mode	OK		Sekwati Ramonyai - 417416
10084	R	Verify on the DDU screen that the bright mode is ON and corresponds with the square lighting on the button 70S2 and label on the Driver's desk	OK		Sekwati Ramonyai - 417416
10085	A	Press button 70S2 to activate Dimmed Headlight	OK		Sekwati Ramonyai - 417416
10086	R	White light 70H3 and 70H4 are in dimmed mode	OK		Sekwati Ramonyai - 417416
10087	R	Verify label on the Driver's desk	OK		Sekwati Ramonyai - 417416
10088	A	Press and maintain the whistle button 71S1	OK		Sekwati Ramonyai - 417416
10089	R	The whistle can be heard on TC1 cab	OK		Sekwati Ramonyai - 417416
10090	A	Release the whistle button 71S1	OK		Sekwati Ramonyai - 417416
10091	R	The whistle stops	OK		Sekwati Ramonyai - 417416
10092	A	Press the foot pedal and maintain it	OK		Sekwati Ramonyai - 417416
10093	R	The high pitch horn can be heard within 100m distance	OK		Sekwati Ramonyai - 417416

10094	A	Release the foot pedal	OK		Sekwati Ramonyai - 417416
10095	R	The high pitch horn stops	OK		Sekwati Ramonyai - 417416
10096	A	Press the DOOR AUTH LEFT button 50S5	OK		Sekwati Ramonyai - 417416
10097	A	Turn the switch 72S10 to open the left mirror and maintain it	OK		Sekwati Ramonyai - 417416
10098	R	The mirror opens wide enough to show the full platform and the glass is not blurry	OK		Sekwati Ramonyai - 417416
10099	A	Release the switch 72S10	OK		Sekwati Ramonyai - 417416
10100	R	The mirror returns to the closed position	OK		Sekwati Ramonyai - 417416
10101	A	Press the DOOR AUTH RIGHT button 50S6	OK		Sekwati Ramonyai - 417416
10102	A	Turn the switch 72S10 to open the right mirror and maintain it	OK		Sekwati Ramonyai - 417416
10103	R	The mirror opens wide enough to show the full platform and the glass is not blurry	OK		Sekwati Ramonyai - 417416
10104	A	Release the switch 72S10	OK		Sekwati Ramonyai - 417416
10105	R	The mirror returns to the closed position	OK		Sekwati Ramonyai - 417416
10106	A	Press the door close left button 50S3	OK		Sekwati Ramonyai - 417416
10107	A	Press the door close right button 50S4	OK		Sekwati Ramonyai - 417416
10108	I	Pre-departure tests TC1	OK		Sekwati Ramonyai - 417416
10109	A	On the DDU screen, press the Brake Test virtual button and follow the steps to run the brake test for all four traction units	OK		Sekwati Ramonyai - 417416
10110	R	After the brake test has been completed, the test indicates as passed on DDU screen	OK		Sekwati Ramonyai - 417416
10111	R	No brake faults have been loaded on the event's list on the DDU screen	OK		Sekwati Ramonyai - 417416
10112	A	On the DDU screen, press the Traction Test virtual button and follow the steps to run the traction test	OK		Sekwati Ramonyai - 417416
10113	R	After the traction test has been completed and passed on the DDU screen, verify that no faults have been loaded on the Driver's	OK		Sekwati Ramonyai - 417416

		event list			
10114	A	Turn the battery contactor 18S1 to OFF position	OK		Sekwati Ramonyai - 417416
10115	A	Wait at least 1 minute for Pacis system to completely shutdown	OK		Sekwati Ramonyai - 417416
10116	R	Verify that the ACU agate is OFF in TC1	OK		Sekwati Ramonyai - 417416
10117	A	Turn the battery contactor 18S1 to ON position	OK		Sekwati Ramonyai - 417416
10118	A	After TCMS initialisation, press the automatic start button 20S1	OK		Sekwati Ramonyai - 417416
10119	R	After few minutes, the train is in Prepared state	OK		Sekwati Ramonyai - 417416
10120	A	Login on the ERTMS Screen as using the Driver's code 70787878	OK		Sekwati Ramonyai - 417416
10121	A	Enter the Train number	OK		Sekwati Ramonyai - 417416
10122	A	Launch the mission 8100 for Pretoria	OK		Sekwati Ramonyai - 417416
10123	R	The Train number and mission are displayed on the DDU screen	OK		Sekwati Ramonyai - 417416
10124	I	UHF Radio Test TC1	OK		Sekwati Ramonyai - 417416
10125	A	Enter train number "91001" and press select	OK		Sekwati Ramonyai - 417416
10126	R	The Radio displays "D 9900" and the network bars are visible	OK		Sekwati Ramonyai - 417416
10127	A	Dial " 204 2001 203" and press the PTT key to call the Metro base station in Johannesburg	OK		Sekwati Ramonyai - 417416
10128	R	The radio displays a calling screen, with a 4 minute timer	OK		Sekwati Ramonyai - 417416
10129	A	Listen for a response, Identify yourself and request a call back to verify that the radio can receive calls. End the call	OK		Sekwati Ramonyai - 417416
10130	R	The Radio can make a call and communication is clear	OK		Sekwati Ramonyai - 417416
10131	A	Answer the incoming call, Identify yourself and end the call	OK		Sekwati Ramonyai - 417416

10132	R	The Radio can receive a call and communication is clear	OK		Sekwati Ramonyai - 417416
10133	I	GSM Radio Test TC1			
10134	A	On the GSM cab radio, verify radio is not faulty and the network is available			
10135	A	Initiate a call by dialling the phone number provided by the Prasa personnel available during ACT to communicate with the Prasa ground station			
10136	R	When call has been received at the Prasa station, Identify yourself and verify communication is clear during the call			
10137	A	Request permission to use the Mainline for Acceptance test			
10138	R	Permission to use the Mainline for Acceptance test has been granted	OK		Sekwati Ramonyai - 417416
10139	A	Turn the battery contactor 18S1 to OFF position	OK		Sekwati Ramonyai - 417416
10140	I	Automatic Train Preparation TC2	OK		Sekwati Ramonyai - 417416
10141	I	Train should be OFF	OK		Sekwati Ramonyai - 417416
10142	I	Backup Mode switch 27S1 should be in NORMAL position	OK		Sekwati Ramonyai - 417416
10143	A	Turn the Driver's Master Key to ON position	OK		Sekwati Ramonyai - 417416
10144	A	Close the battery contactor 18S1	OK		Sekwati Ramonyai - 417416
10145	R	After few minutes, the train is LV ready with TCMS available	OK		Sekwati Ramonyai - 417416
10146	R	The battery voltage is 110V on the line voltage indicator	OK		Sekwati Ramonyai - 417416
10147	A	Login on the ERTMS Screen as using the Driver's code 70787878	OK		Sekwati Ramonyai - 417416
10148	A	Enter the Train number	OK		Sekwati Ramonyai - 417416
10149	A	Launch the mission 8100 for Pretoria	OK		Sekwati Ramonyai - 417416
10150	R	The Train number and mission are displayed on the DDU screen	OK		Sekwati Ramonyai - 417416

10151	A	Press the automatic start button 20S1 or the virtual button on the DDU screen	OK		Sekwati Ramonyai - 417416
10152	R	The automatic start button 20S1 is flashing during the train preparation	OK		Sekwati Ramonyai - 417416
10153	R	On DDU screen, both pantographs are raised	OK		Sekwati Ramonyai - 417416
10154	R	Verify that both pantographs are raised when looking outside the train	OK		Sekwati Ramonyai - 417416
10155	R	On the Driver's desk, the button lamp of 21S1 is ON	OK		Sekwati Ramonyai - 417416
10156	R	On DDU screen, both HSCBs are closed	OK		Sekwati Ramonyai - 417416
10157	R	On the Driver's desk, the button lamp of HSCB closed 22S11 is ON	OK		Sekwati Ramonyai - 417416
10158	R	The automatic start button 20S1 stays ON after train preparation is complete	OK		Sekwati Ramonyai - 417416
10159	I	Train is in Prepared state	OK		Sekwati Ramonyai - 417416
10160	R	Check the line voltage on the Line voltage indicator and verify on the DDu screen that the value is more or less the same	OK		Sekwati Ramonyai - 417416
10161	R	Line Voltage Result Min : 2700<= x (V)	OK	3200	Sekwati Ramonyai - 417416
10162	A	Check the pressure indicator on the pneumatic gauge are correctly set	OK		Sekwati Ramonyai - 417416
10163	R	The indicator for the Main pipe is Red and the brake pipe is Yellow	OK		Sekwati Ramonyai - 417416
10164	I	Doors command TC2	OK		Sekwati Ramonyai - 417416
10165	I	Door status on DDU screen	OK		Sekwati Ramonyai - 417416
10166	A	Put the Door Auth Switch 50S7 in DRIVER position	OK		Sekwati Ramonyai - 417416
10167	A	Put the switch 30S1 in Depot Driving mode	OK		Sekwati Ramonyai - 417416
10168	R	All doors are closed and indicated in BLUE colour on the DDU screen	OK		Sekwati Ramonyai - 417416
10169	A	Press the DOOR AUTH left button 50S5	OK		Sekwati Ramonyai - 417416
10170	A	Press the DOOR OPEN left button 50S1	OK		Sekwati Ramonyai - 417416

10171	A	Press the DOOR AUTH right button 50S6	OK		Sekwati Ramonyai - 417416
10172	A	Press the DOOR OPEN right button 50S2	OK		Sekwati Ramonyai - 417416
10173	R	All doors are open and indicated in WHITE color on the DDU screen	OK		Sekwati Ramonyai - 417416
10174	A	Press the DOOR CLOSE left button 50S3	OK		Sekwati Ramonyai - 417416
10175	A	Press the DOOR CLOSE right button 50S4	OK		Sekwati Ramonyai - 417416
10176	R	All doors are closed and indicated in BLUE color on the DDU screen	OK		Sekwati Ramonyai - 417416
10177	I	External Lighting and Signalling TC2	OK		Sekwati Ramonyai - 417416
10178	I	The light status should be verified in both TC cars (front and back) in each case	OK		Sekwati Ramonyai - 417416
10179	R	Check white light 70H11 is ON (TC2 car)	OK		Sekwati Ramonyai - 417416
10180	R	Check red light 70H11 is OFF. Left side of the car (TC2 car	OK		Sekwati Ramonyai - 417416
10181	R	Check white lights 70H5 and 70H6 are ON (TC2 car)	OK		Sekwati Ramonyai - 417416
10182	R	Check red lights 70H7 and 70H9 are OFF (TC2 car).	OK		Sekwati Ramonyai - 417416
10183	R	Check white light 70H11 is OFF (TC1 car)	OK		Sekwati Ramonyai - 417416
10184	R	Check red light 70H11 is ON. Left side of the car (TC1 car)	OK		Sekwati Ramonyai - 417416
10185	R	Check white lights 70H5 and 70H6 are OFF (TC1 car)	OK		Sekwati Ramonyai - 417416
10186	R	Check red lights 70H7 and 70H9 are ON (TC1 car)	OK		Sekwati Ramonyai - 417416
10187	R	Check Headlights 70H3 and 70H4 are OFF (TC1 car)	OK		Sekwati Ramonyai - 417416
10188	A	Press button 70S2 to activate Bright Headlight	OK		Sekwati Ramonyai - 417416
10189	R	White light 70H3 and 70H4 are in bright mode	OK		Sekwati Ramonyai - 417416
10190	R	Verify on the DDU screen that the bright mode is ON and corresponds with the square lighting on the button 70S2 and	OK		Sekwati Ramonyai - 417416

		label on the Driver's desk			
10191	A	Press button 70S2 to activate Dimmed Headlight	OK		Sekwati Ramonyai - 417416
10192	R	White light 70H3 and 70H4 are in dimmed mode	OK		Sekwati Ramonyai - 417416
10193	R	Verify label on the Driver's desk	OK		Sekwati Ramonyai - 417416
10194	A	Press and maintain the whistle button 71S1	OK		Sekwati Ramonyai - 417416
10195	R	The whistle can be heard on TC1 cab	OK		Sekwati Ramonyai - 417416
10196	A	Release the whistle button 71S1	OK		Sekwati Ramonyai - 417416
10197	R	The whistle stops	OK		Sekwati Ramonyai - 417416
10198	A	Press the foot pedal and maintain it	OK		Sekwati Ramonyai - 417416
10199	R	The high pitch horn can be heard within 100m distance	OK		Sekwati Ramonyai - 417416
10200	A	Release the foot pedal	OK		Sekwati Ramonyai - 417416
10201	R	The high pitch horn stops	OK		Sekwati Ramonyai - 417416
10202	A	Press the DOOR AUTH LEFT button 50S5	OK		Sekwati Ramonyai - 417416
10203	A	Turn the switch 72S10 to open the left mirror and maintain it	OK		Sekwati Ramonyai - 417416
10204	R	The mirror opens wide enough to show the full platform and the glass is not blurry	OK		Sekwati Ramonyai - 417416
10205	A	Release the switch 72S10	OK		Sekwati Ramonyai - 417416
10206	R	The mirror returns to the closed position	OK		Sekwati Ramonyai - 417416
10207	A	Press the DOOR AUTH RIGHT button 50S6	OK		Sekwati Ramonyai - 417416
10208	A	Turn the switch 72S10 to open the right mirror and maintain it	OK		Sekwati Ramonyai - 417416
10209	R	The mirror opens wide enough to show the full platform and the glass is not blurry	OK		Sekwati Ramonyai - 417416
10210	A	Release the switch 72S10	OK		Sekwati Ramonyai - 417416
10211	R	The mirror returns to the closed position	OK		Sekwati Ramonyai - 417416

10212	A	Press the door close left button 50S3	OK		Sekwati Ramonyai - 417416
10213	A	Press the door close right button 50S4	OK		Sekwati Ramonyai - 417416
10214	I	Pre-departure tests TC2	OK		Sekwati Ramonyai - 417416
10215	A	On the DDU screen, press the Brake Test virtual button and follow the steps to run the brake test for all four traction units	OK		Sekwati Ramonyai - 417416
10216	R	After the brake test has been completed, the test indicates as passed on DDU screen	OK		Sekwati Ramonyai - 417416
10217	R	No brake faults have been loaded on the event's list on the DDU screen	OK		Sekwati Ramonyai - 417416
10218	A	On the DDU screen, press the Traction Test virtual button and follow the steps to run the traction test	OK		Sekwati Ramonyai - 417416
10219	R	After the traction test has been completed and passed on the DDU screen, verify that no faults have been loaded on the Driver's event list	OK		Sekwati Ramonyai - 417416
10220	A	Turn the battery contactor 18S1 to OFF position	OK		Sekwati Ramonyai - 417416
10221	A	Wait at least 1 minute for Pacis system to completely shutdown	OK		Sekwati Ramonyai - 417416
10222	R	Verify that the ACU agate is OFF in TC2	OK		Sekwati Ramonyai - 417416
10223	A	Turn the battery contactor 18S1 to ON position	OK		Sekwati Ramonyai - 417416
10224	A	After TCMS initialisation, press the automatic start button 20S1	OK		Sekwati Ramonyai - 417416
10225	R	After few minutes, the train is in Prepared state	OK		Sekwati Ramonyai - 417416
10226	A	Login on the ERTMS Screen as using the Driver's code 12345612	OK		Sekwati Ramonyai - 417416
10227	A	Enter the Train number	OK		Sekwati Ramonyai - 417416
10228	A	Launch the mission 8100 for Pretoria	OK		Sekwati Ramonyai - 417416
10229	R	The Train number and mission are displayed on the DDU screen	OK		Sekwati Ramonyai - 417416

10230	I	UHF Radio Test TC2	OK		Sekwati Ramonyai - 417416
10231	A	Enter train number "91001" and press select	OK		Sekwati Ramonyai - 417416
10232	R	The Radio displays "D 9900" and the network bars are visible	OK		Sekwati Ramonyai - 417416
10233	A	Dial " 204 2001 203" and press the PTT key to call the Metro base station in Johannesburg	OK		Sekwati Ramonyai - 417416
10234	R	The radio displays a calling screen, with a 4 minute timer	OK		Sekwati Ramonyai - 417416
10235	A	Listen for a response, Identify yourself and request a call back to verify that the radio can receive calls. End the call	OK		Sekwati Ramonyai - 417416
10236	R	The Radio can make a call and communication is clear	OK		Sekwati Ramonyai - 417416
10237	A	Answer the incoming call, Identify yourself and end the call	OK		Sekwati Ramonyai - 417416
10238	R	The Radio can receive a call and communication is clear	OK		Sekwati Ramonyai - 417416
10239	I	GSM Radio Test TC2			
10240	A	On the GSM cab radio, verify radio is not faulty and the network is available			
10241	A	Initiate a call by dialling the phone number provided by the Prasa personnel available during ACT to communicate with the Prasa ground station.			
10242	R	When call has been received at the Prasa station, Identify yourself and verify communication is clear during the call			
10243	A	Turn the battery contactor 18S1 to OFF position	OK		Sekwati Ramonyai - 417416
10244	A	Remove active cab on TC2	OK		Sekwati Ramonyai - 417416
10245	I	Dynamic Test	OK		Sekwati Ramonyai - 417416
10246	I	Initial conditions	OK		Sekwati Ramonyai - 417416
10247	I	The tests shall be done under dry and calm weather conditions.	OK		Sekwati Ramonyai - 417416

10248	I	Traction and Braking tests shall be carried out on a straight (R≥700m) well bedded level track (maximum gradient ≤5‰ with at least 3km length. This track should be dry and clean when performing the tests, and not carried out under degraded adhesion conditions.	OK		Sekwati Ramonyai - 417416
10249	I	The 3,3kV nominal electric supply should be capable to accelerate the Module up to required speed. The supply voltage should not drop below 2,7kV during the tests.	OK		Sekwati Ramonyai - 417416
10250	I	The tests must be performed on a healthy PRASA 'Xtrapolis 6 car module and fully mounted. If components are missing (in particular components participating in the vehicle aerodynamics or mass), it shall be noted down, and it shall be decided at the time of the test if can be performed or not. Tests could be conducted with maximum diameter wheels. Tests must be conducted with all cars fully functional except when otherwise requested.	OK		Sekwati Ramonyai - 417416
10251	I	It is required one test to each direction, but the variation on the results must be considered and additional tests may be necessary.	OK		Sekwati Ramonyai - 417416
10252	I	The tests shall be performed in M1 load condition (mass per vehicle with all equipment).	OK		Sekwati Ramonyai - 417416
10253	I	Train running in ETCS level 0 TC1	OK		Sekwati Ramonyai - 417416
10254	A	Active cab on TC1	OK		Sekwati Ramonyai - 417416
10255	I	Take the Train till ERTMS zone and there the Train shall be turned off.	OK		Sekwati Ramonyai - 417416
10256	A	Push the Automatic Start Pushbutton (20S1) on the Driver Desk or virtual button on DDU Screen.	OK		Sekwati Ramonyai - 417416
10257	R	Train deprepared.	OK		Sekwati Ramonyai - 417416
10258	A	Turn Battery Contactor Switch (18S1) to "OFF" Position on TC1 Car.	OK		Sekwati Ramonyai - 417416
10259	R	Check on DDU SCREEN the message: "Shutdown In Progress".	OK		Sekwati Ramonyai - 417416
10260	R	In 30 seconds, Train will be completely OFF.	OK		Sekwati Ramonyai - 417416

10261	A	Turn the ERTMS Isolation switch (62S1) to the "NORMAL" position in TC1 and TC2 cabs.	OK		Sekwati Ramonyai - 417416
10262	A	Turn the Driver's Master key (30A1S1) into the "ON" position in the TC1 cab.	OK		Sekwati Ramonyai - 417416
10263	A	Turn Battery Contactor Switch (18S1) to "ON" Position on TC1 Car.	OK		Sekwati Ramonyai - 417416
10264	A	Wait until appears the Login screen on ERTMS DMI screen, and then enters the driver's identification number.	OK		Sekwati Ramonyai - 417416
10265	A	Select ETCS level 0.	OK		Sekwati Ramonyai - 417416
10266	A	On ERTMS DMI screen, enter the number of cars of the Train (6 cars).	OK		Sekwati Ramonyai - 417416
10267	A	On ERTMS DMI screen, enter the nominal brake percentage (209%), which means that there is no car with pneumatic brake isolated on the Train.	OK		Sekwati Ramonyai - 417416
10268	A	On ERTMS DMI screen, enter the respective Train Running Number.	OK		Sekwati Ramonyai - 417416
10269	A	Select start from main menu option 1 (ETCS should now be in unfitted mode).	OK		Sekwati Ramonyai - 417416
10270	I	In unfitted mode the ETCS speed protection mode is set to 100km/h.	OK		Sekwati Ramonyai - 417416
10271	A	Push the Automatic Start Pushbutton (20S1) on the Driver Desk or virtual button on DDU Screen.	OK		Sekwati Ramonyai - 417416
10272	R	Train in Prepared state with both Pantographs UP and both HSCBs closed.	OK		Sekwati Ramonyai - 417416
10273	A	Set the Driving Mode Switch to "EFFORT" position in TC1 cab.	OK		Sekwati Ramonyai - 417416
10274	A	Set the Driving Direction Switch to "FORWARD" position.	OK		Sekwati Ramonyai - 417416
10275	A	Accelerate the train to 100 km/h and continue to slowly to increase the speed (Note stay within allowed track speed).	OK		Sekwati Ramonyai - 417416
10276	R	When the Train speed overpass the warning speed of 104 km/h, a warning sound can be heard on active cab.	OK		Sekwati Ramonyai - 417416

10277	R	Full service brake applied on the Train by ERTMS because Train speed overpasses the service brake intervention curve calculated by ERTMS system.	OK		Sekwati Ramonyai - 417416
10278	R	The service brake is released below 100 km/h.	OK		Sekwati Ramonyai - 417416
10279	A	Set the Master Controller to "MAX TRACTION" position.	OK		Sekwati Ramonyai - 417416
10280	R	Train starts to run with max traction effort.	OK		Sekwati Ramonyai - 417416
10281	A	Continue increasing slowly the traction effort until the train applies full service brake by the ERTMS (around 106 km/h).	OK		Sekwati Ramonyai - 417416
10282	R	When the Train overpass the emergency brake intervention of 107.5 km/h, the emergency brake is applied by the ERTMS and ERTMS Brake Icon displayed on the ERTMS DMI.	OK		Sekwati Ramonyai - 417416
10283	R	Train comes to a complete stop and ERTMS brake Icon disappears from the DMI.	OK		Sekwati Ramonyai - 417416
10284	R	The pantographs are lowered and the HSCB are opened.	OK		Sekwati Ramonyai - 417416
10285	A	Raise the pantographs and close the HSCB by the automatic switch.	OK		Sekwati Ramonyai - 417416
10286	A	Reset the emergency brake setting the direction switch (S2.2) to "NEUTRAL" position and then to "FORWARD" position again.	OK		Sekwati Ramonyai - 417416
10287	A	Remove active cab on TC1	OK		Sekwati Ramonyai - 417416
10288	I	Train running in ETCS level 0 TC2	OK		Sekwati Ramonyai - 417416
10289	A	Active cab on TC2	OK		Sekwati Ramonyai - 417416
10290	A	Turn the ERTMS Isolation switch (62S1) to the "NORMAL" position in TC1 and TC2 cabs.	OK		Sekwati Ramonyai - 417416
10291	A	Wait until appears the Login screen on ERTMS DMI screen, and then enters the driver's identification number.	OK		Sekwati Ramonyai - 417416
10292	A	Select ETCS level 0.	OK		Sekwati Ramonyai - 417416

10293	A	On ERTMS DMI screen, enter the number of cars of the Train (6 cars).	OK		Sekwati Ramonyai - 417416
10294	A	On ERTMS DMI screen, enter the nominal brake percentage (209%), which means that there is no car with pneumatic brake isolated on the Train.	OK		Sekwati Ramonyai - 417416
10295	A	On ERTMS DMI screen, enter the respective Train Running Number.	OK		Sekwati Ramonyai - 417416
10296	A	Select start from main menu option 1 (ETCS should now be in unfitted mode).	OK		Sekwati Ramonyai - 417416
10297	I	The Train shall be turned off.	OK		Sekwati Ramonyai - 417416
10298	I	In unfitted mode the ETCS speed protection mode is set to 100km/h.	OK		Sekwati Ramonyai - 417416
10299	A	Push the Automatic Start Pushbutton (20S1) on the Driver Desk or virtual button on DDU Screen.	OK		Sekwati Ramonyai - 417416
10300	R	Train in Prepared state with both Pantographs UP and both HSCBs closed.	OK		Sekwati Ramonyai - 417416
10301	A	Set the Driving Mode Switch to "EFFORT" position in TC1 cab.	OK		Sekwati Ramonyai - 417416
10302	A	Set the Driving Direction Switch to "FORWARD" position.	OK		Sekwati Ramonyai - 417416
10303	A	Accelerate the train to 100 km/h and continue to slowly to increase the speed (Note stay within allowed track speed).	OK		Sekwati Ramonyai - 417416
10304	R	When the Train speed overpass the warning speed of 104 km/h, a warning sound can be heard on active cab.	OK		Sekwati Ramonyai - 417416
10305	R	Full service brake applied on the Train by ERTMS because Train speed overpasses the service brake intervention curve calculated by ERTMS system.	OK		Sekwati Ramonyai - 417416
10306	R	The service brake is released below 100 km/h.	OK		Sekwati Ramonyai - 417416
10307	A	Set the Master Controller to "MAX TRACTION" position.	OK		Sekwati Ramonyai - 417416
10308	R	Train starts to run with max traction effort.	OK		Sekwati Ramonyai - 417416

10309	A	Continue increasing slowly the traction effort until the train applies full service brake by the ERTMS (around 106 km/h).	OK		Sekwati Ramonyai - 417416
10310	R	When the Train overpass the emergency brake intervention of 107.5 km/h, the emergency brake is applied by the ERTMS and ERTMS Brake Icon displayed on the ERTMS DMI.	OK		Sekwati Ramonyai - 417416
10311	R	Train comes to a complete stop and ERTMS brake Icon disappears from the DMI.	OK		Sekwati Ramonyai - 417416
10312	R	The pantographs are lowered and the HSCB are opened.	OK		Sekwati Ramonyai - 417416
10313	A	Put the direction switch (S2.2) to "NEUTRAL" position.	OK		Sekwati Ramonyai - 417416
10314	A	Raise the pantographs and close the HSCB by the automatic switch.	OK		Sekwati Ramonyai - 417416
10315	I	Brakes Bedding	OK		Sekwati Ramonyai - 417416
10316	I	Bedding is a process where the brake pads and the brake disc must be at maximum contact with each other (Smooth surface). This allows the train to have maximum performance on the brakes.	OK		Sekwati Ramonyai - 417416
10317	I	When bedding the train, set the master controller to max traction position and accelerate the train up to 120km/h and use emergency brake to stop.	OK		Sekwati Ramonyai - 417416
10318	A	After ERTMS test start bedding all the way to Taillardshoop Station. Then bed all the way to Rosslyn Station and back to Taillardshoop Station. These equates to 3 bedding runs.	OK		Sekwati Ramonyai - 417416
10319	I	Preparation for Traction and Braking tests	OK		Sekwati Ramonyai - 417416
10320	A	Connect a laptop to the train network through the software TrainTracer and prepare it to record the following variables: REC_TrainSpeed Li_DRC_Tc1MCBrakeR1 Li_DRC_Tc2MCBrakeR1 Li_UBK_Tc1EmgcyBrkPBR1 Li_UBK_Tc2EmgcyBrkPBR1	OK		Sekwati Ramonyai - 417416
10321	A	Use the following attached document to calculate the Acceleration for each speed	OK		Sekwati Ramonyai - 417416

10322	A	Use the following attached document to save all the curves for each speed	OK		Sekwati Ramonyai - 417416
10323	A	Prepare the train with active cab on TC1	OK		Sekwati Ramonyai - 417416
10324	A	Verify that the emergency brake mushroom buttons "44S1" are released in both cabs.	OK		Sekwati Ramonyai - 417416
10325	A	Set the Master Controller to "OFF" position.	OK		Sekwati Ramonyai - 417416
10326	A	Turn the ERTMS Isolation switch (62S1) to the "ISOLATION" position in TC1 cab.	OK		Sekwati Ramonyai - 417416
10327	A	Set the Driving Mode Switch to "EFFORT" position in TC1 cab.	OK		Sekwati Ramonyai - 417416
10328	A	Set the Driving Direction Switch to "FORWARD" position.	OK		Sekwati Ramonyai - 417416
10329	R	Traction system is enabled to start the test.	OK		Sekwati Ramonyai - 417416
10330	I	Train maximum speed and stopping distance test in normal brake condition at 120km/h TC1	OK		Sekwati Ramonyai - 417416
10331	A	Force [TT] SBK_BrakeDist = 0.0	OK		Sekwati Ramonyai - 417416
10332	A	Release [TT] SBK_BrakeDist	OK		Sekwati Ramonyai - 417416
10333	A	Active Cab on TC1	OK		Sekwati Ramonyai - 417416
10334	A	With the Train Tracer, start to record the variables listed on Preparation topic above.	OK		Sekwati Ramonyai - 417416
10335	A	Set the Master Controller to "MAX TRACTION" position and accelerate the train up to 120 km/h.	OK		Sekwati Ramonyai - 417416
10336	A	At 120km/h, keep the Master Controller in "MAX TRACTION" position accelerating the train up to a speed of 123km/h.	OK		Sekwati Ramonyai - 417416
10337	A	After reached the speed of 123km/h, set the Master Controller to "OFF" position until the Train reduces the speed to 120±2km/h and then set the Master to "MAX SERVICE BRAKE" position until the	OK		Sekwati Ramonyai - 417416

		train comes to a complete stop.			
10338	A	Stop the Train Tracer recording process.	OK		Sekwati Ramonyai - 417416
10339	R	Result Max [TT] SBK_BrakeDist : x <= 680	OK	581	Sekwati Ramonyai - 417416
10340	A	Check that the train reached a speed of 123km/h within approximately 4 seconds after reaching 120km/h.	OK		Sekwati Ramonyai - 417416
10341	R	Time to reach 123km/h from 120km/h is not higher than 4 seconds.	OK		Sekwati Ramonyai - 417416
10342	A	Take a screenshot of the recorded variables from TrainTracer and paste on the Brake Test Results Template (Showing the acceleration from 120 to 123 km/h)	OK		Sekwati Ramonyai - 417416
10343	A	Use the Deceleration Calculation Template to calculate the deceleration	OK		Sekwati Ramonyai - 417416
10344	R	The mean deceleration rate must be at least 0,9m/s².	OK		Sekwati Ramonyai - 417416
10345	A	Remove active cab on TC1	OK		Sekwati Ramonyai - 417416
10346	I	Train maximum speed and stopping distance test in normal brake condition at 120km/h TC2	OK		Sekwati Ramonyai - 417416
10347	A	Force [TT] SBK_BrakeDist = 0.0	OK		Sekwati Ramonyai - 417416
10348	A	Release [TT] SBK_BrakeDist	OK		Sekwati Ramonyai - 417416
10349	A	Active cab on TC2	OK		Sekwati Ramonyai - 417416
10350	A	With the Train Tracer, start to record the variables listed on Preparation topic above.	OK		Sekwati Ramonyai - 417416
10351	A	Set the Master Controller to "MAX TRACTION" position and accelerate the train up to 120 km/h.	OK		Sekwati Ramonyai - 417416
10352	A	At 120km/h, keep the Master Controller in "MAX TRACTION" position accelerating the train up to a speed of 123km/h.	OK		Sekwati Ramonyai - 417416
10353	A	After reached the speed of 123km/h, set the Master Controller to "OFF" position until the Train reduces the speed to 120±2km/h and then set the Master to "MAX SERVICE BRAKE" position until the	OK		Sekwati Ramonyai - 417416

		train comes to a complete stop.			
10354	A	Stop the Train Tracer recording process.	OK		Sekwati Ramonyai - 417416
10355	R	Result Max [TT] SBK_BrakeDist : x <= 680	OK	528	Sekwati Ramonyai - 417416
10356	A	Check that the train reached a speed of 123km/h within approximately 4 seconds after reaching 120km/h.	OK		Sekwati Ramonyai - 417416
10357	R	Time to reach 123km/h from 120km/h is not higher than 4 seconds.	OK		Sekwati Ramonyai - 417416
10358	A	Take a screenshot of the recorded variables from TrainTracer and paste on the Brake Test Results Template (Showing the acceleration from 120 to 123 km/h)	OK		Sekwati Ramonyai - 417416
10359	A	Use the Deceleration Calculation Template to calculate the deceleration	OK		Sekwati Ramonyai - 417416
10360	R	The mean deceleration rate must be at least 0,9m/s².	OK		Sekwati Ramonyai - 417416
10361	A	Remove active cab on TC2	OK		Sekwati Ramonyai - 417416
10362	I	Stopping distance test in normal brake condition at 100km/h TC1	OK		Sekwati Ramonyai - 417416
10363	A	Force [TT] SBK_BrakeDist = 0.0	OK		Sekwati Ramonyai - 417416
10364	A	Release [TT] SBK_BrakeDist	OK		Sekwati Ramonyai - 417416
10365	A	Active cab in TC1	OK		Sekwati Ramonyai - 417416
10366	A	Set the Master Controller to "MAX TRACTION" position and accelerate the train up to 100±2 km/h.	OK		Sekwati Ramonyai - 417416
10367	A	Set the Master Controller to "OFF" position for 5 seconds and then to "MAX SERVICE BRAKE" position until the train comes to a complete stop.	OK		Sekwati Ramonyai - 417416
10368	R	Result Max [TT] SBK_BrakeDist : x <= 567	OK	383	Sekwati Ramonyai - 417416
10369	A	Take a screenshot of the recorded variables from TrainTracer and paste on the Brake Test Results Template.	OK		Sekwati Ramonyai - 417416
10370	A	Use the Deceleration Calculation Template to calculate the deceleration	OK		Sekwati Ramonyai - 417416

10371	A	Remove active cab on TC1	OK		Sekwati Ramonyai - 417416
10372	I	Stopping distance test in normal brake condition at 100km/h TC2	OK		Sekwati Ramonyai - 417416
10373	A	Force [TT] SBK_BrakeDist = 0.0	OK		Sekwati Ramonyai - 417416
10374	A	Release [TT] SBK_BrakeDist	OK		Sekwati Ramonyai - 417416
10375	A	Active cab in TC2	OK		Sekwati Ramonyai - 417416
10376	A	Set the Master Controller to "MAX TRACTION" position and accelerate the train up to 100±2 km/h.	OK		Sekwati Ramonyai - 417416
10377	A	Set the Master Controller to "OFF" position for 5 seconds and then to "MAX SERVICE BRAKE" position until the train comes to a complete stop.	OK		Sekwati Ramonyai - 417416
10378	R	Result Max [TT] SBK_BrakeDist : x <= 567	OK	372	Sekwati Ramonyai - 417416
10379	A	Take a screenshot of the recorded variables from TrainTracer and paste on the Brake Test Results Template.	OK		Sekwati Ramonyai - 417416
10380	A	Use the Deceleration Calculation Template to calculate the deceleration	OK		Sekwati Ramonyai - 417416
10381	A	Remove active cab on TC2	OK		Sekwati Ramonyai - 417416
10382	I	Stopping distance test in degraded brake condition at 120km/h TC1	OK		Sekwati Ramonyai - 417416
10383	A	Active cab in TC1	OK		Sekwati Ramonyai - 417416
10384	I	Disabling the electrical braking in all motor cars.	OK		Sekwati Ramonyai - 417416
10385	A	Force [TT] (TBCU1)f55_b_br_auth = 0.0	OK		Sekwati Ramonyai - 417416
10386	A	Force [TT] (TBCU2)f55_b_br_auth = 0.0	OK		Sekwati Ramonyai - 417416
10387	A	Force [TT] (TBCU3)f55_b_br_auth = 0.0	OK		Sekwati Ramonyai - 417416
10388	A	Force [TT] (TBCU4)f55_b_br_auth = 0.0	OK		Sekwati Ramonyai - 417416
10389	R	Electrical braking is inhibited in all M cars	OK		Sekwati Ramonyai - 417416
10390	A	Force [TT] SBK_BrakeDist = 0.0	OK		Sekwati Ramonyai - 417416
10391	A	Release [TT] SBK_BrakeDist	OK		Sekwati Ramonyai - 417416

10392	A	With the Train Tracer, start to record the variables listed on Preparation topic above.	OK		Sekwati Ramonyai - 417416
10393	A	Set the Master Controller to "MAX TRACTION" position and accelerate the train up to 120±2 km/h.	OK		Sekwati Ramonyai - 417416
10394	A	Set the Master Controller to "OFF" position for 5 seconds and then to "MAX SERVICE BRAKE" position until the train comes to a complete stop.	OK		Sekwati Ramonyai - 417416
10395	A	Stop the Train Tracer recording process.	OK		Sekwati Ramonyai - 417416
10396	R	Result Max [TT] SBK_BrakeDist : x <= 680	OK	654	Sekwati Ramonyai - 417416
10397	A	Take a screenshot of the recorded variables from TrainTracer and paste on the Brake Test Results Template.	OK		Sekwati Ramonyai - 417416
10398	A	Use the Deceleration Calculation Template to calculate the deceleration	OK		Sekwati Ramonyai - 417416
10399	R	The mean deceleration rate must be at least 0,9m/s².	OK		Sekwati Ramonyai - 417416
10400	I	Normalising the electrical braking on M cars	OK		Sekwati Ramonyai - 417416
10401	A	Put the direction selector switch in NEUTRAL position	OK		Sekwati Ramonyai - 417416
10402	A	Release [TT] (TBCU1)f55_b_br_auth	OK		Sekwati Ramonyai - 417416
10403	A	Release [TT] (TBCU2)f55_b_br_auth	OK		Sekwati Ramonyai - 417416
10404	A	Release [TT] (TBCU3)f55_b_br_auth	OK		Sekwati Ramonyai - 417416
10405	A	Release [TT] (TBCU4)f55_b_br_auth	OK		Sekwati Ramonyai - 417416
10406	A	Remove active cab on TC1	OK		Sekwati Ramonyai - 417416
10407	I	Stopping distance test in degraded brake condition at 120km/h TC2	OK		Sekwati Ramonyai - 417416
10408	A	Active cab on TC2	OK		Sekwati Ramonyai - 417416
10409	I	Disabling the electrical braking in all motor cars.	OK		Sekwati Ramonyai - 417416
10410	A	Force [TT] (TBCU1)f55_b_br_auth = 0.0	OK		Sekwati Ramonyai - 417416

10411	A	Force [TT] (TBCU2)f55_b_br_auth = 0.0	OK		Sekwati Ramonyai - 417416
10412	A	Force [TT] (TBCU3)f55_b_br_auth = 0.0	OK		Sekwati Ramonyai - 417416
10413	A	Force [TT] (TBCU4)f55_b_br_auth = 0.0	OK		Sekwati Ramonyai - 417416
10414	R	Electrical braking is inhibited in all M cars	OK		Sekwati Ramonyai - 417416
10415	A	Force [TT] SBK_BrakeDist = 0.0	OK		Sekwati Ramonyai - 417416
10416	A	Release [TT] SBK_BrakeDist	OK		Sekwati Ramonyai - 417416
10417	A	With the Train Tracer, start to record the variables listed on Preparation topic above.	OK		Sekwati Ramonyai - 417416
10418	A	Set the Master Controller to "MAX TRACTION" position and accelerate the train up to 120±2 km/h.	OK		Sekwati Ramonyai - 417416
10419	A	Set the Master Controller to "OFF" position for 5 seconds and then to "MAX SERVICE BRAKE" position until the train comes to a complete stop.	OK		Sekwati Ramonyai - 417416
10420	A	Stop the Train Tracer recording process.	OK		Sekwati Ramonyai - 417416
10421	R	Result Max [TT] SBK_BrakeDist : x <= 680	OK	609	Sekwati Ramonyai - 417416
10422	A	Take a screenshot of the recorded variables from TrainTracer and paste on the Brake Test Results Template.	OK		Sekwati Ramonyai - 417416
10423	A	Use the Deceleration Calculation Template to calculate the deceleration	OK		Sekwati Ramonyai - 417416
10424	R	The mean deceleration rate must be at least 0,9m/s².	OK		Sekwati Ramonyai - 417416
10425	I	Normalizing the electrical braking on the Train.	OK		Sekwati Ramonyai - 417416
10426	A	Put the direction selector switch in NEUTRAL position	OK		Sekwati Ramonyai - 417416
10427	A	Release [TT] (TBCU1)f55_b_br_auth	OK		Sekwati Ramonyai - 417416
10428	A	Release [TT] (TBCU2)f55_b_br_auth	OK		Sekwati Ramonyai - 417416
10429	A	Release [TT] (TBCU3)f55_b_br_auth	OK		Sekwati Ramonyai - 417416
10430	A	Release [TT] (TBCU4)f55_b_br_auth	OK		Sekwati Ramonyai - 417416

10431	A	Remove active cab on TC2	OK		Sekwati Ramonyai - 417416
10432	I	Stopping distance test in emergency brake condition at 120km/h TC1	OK		Sekwati Ramonyai - 417416
10433	A	Force [TT] SBK_BrakeDist = 0.0	OK		Sekwati Ramonyai - 417416
10434	A	Release [TT] SBK_BrakeDist	OK		Sekwati Ramonyai - 417416
10435	A	With the Train Tracer, start to record the variables listed on Preparation topic above.	OK		Sekwati Ramonyai - 417416
10436	A	Set the Master Controller to "MAX TRACTION" position and accelerate the train up to 120±2 km/h.	OK		Sekwati Ramonyai - 417416
10437	A	Set the Master Controller to "OFF" position for 5 seconds and then push the emergency brake mushroom button until the train comes to a complete stop.	OK		Sekwati Ramonyai - 417416
10438	A	Stop the Train Tracer recording process.	OK		Sekwati Ramonyai - 417416
10439	I	The stopping distance of the train in emergency brake condition shall not be greater than 480m.	OK		Sekwati Ramonyai - 417416
10440	R	Result Max [TT] SBK_BrakeDist : x <= 480	OK	419	Sekwati Ramonyai - 417416
10441	A	Take a screenshot of the recorded variables from TrainTracer and paste on the Brake Test Results Template	OK		Sekwati Ramonyai - 417416
10442	A	Use the Deceleration Calculation Template to calculate the deceleration	OK		Sekwati Ramonyai - 417416
10443	R	The mean deceleration rate must be at least 1,3m/s².	OK		Sekwati Ramonyai - 417416
10444	A	Normalize the emergency brake mushroom button.	OK		Sekwati Ramonyai - 417416
10445	A	Reset the emergency brake setting the direction switch (S2.2) to "NEUTRAL" position and then to "FORWARD" position again.	OK		Sekwati Ramonyai - 417416
10446	R	Emergency brake released.	OK		Sekwati Ramonyai - 417416
10447	A	Remove active cab on TC1	OK		Sekwati Ramonyai - 417416

10448	I	Stopping distance test in emergency brake condition at 120km/h TC2	OK		Sekwati Ramonyai - 417416
10449	A	Force [TT] SBK_BrakeDist = 0.0	OK		Sekwati Ramonyai - 417416
10450	A	Release [TT] SBK_BrakeDist	OK		Sekwati Ramonyai - 417416
10451	A	Active cab on TC2	OK		Sekwati Ramonyai - 417416
10452	A	With the Train Tracer, start to record the variables listed on Preparation topic above.	OK		Sekwati Ramonyai - 417416
10453	A	Set the Master Controller to "MAX TRACTION" position and accelerate the train up to 120±2 km/h.	OK		Sekwati Ramonyai - 417416
10454	A	Set the Master Controller to "OFF" position for 5 seconds and then push the emergency brake mushroom button until the train comes to a complete stop.	OK		Sekwati Ramonyai - 417416
10455	A	Stop the Train Tracer recording process.	OK		Sekwati Ramonyai - 417416
10456	I	The stopping distance of the train in emergency brake condition shall not be greater than 480m.	OK		Sekwati Ramonyai - 417416
10457	R	Result Max [TT] SBK_BrakeDist : x <= 480	OK	409	Sekwati Ramonyai - 417416
10458	A	Take a screenshot of the recorded variables from TrainTracer and paste on the Brake Test Results Template	OK		Sekwati Ramonyai - 417416
10459	A	Use the Deceleration Calculation Template to calculate the deceleration	OK		Sekwati Ramonyai - 417416
10460	R	The mean deceleration rate must be at least 1,3m/s².	OK		Sekwati Ramonyai - 417416
10461	A	Normalize the emergency brake mushroom button.	OK		Sekwati Ramonyai - 417416
10462	A	Reset the emergency brake setting the direction switch (S2.2) to "NEUTRAL" position and then to "FORWARD" position again.	OK		Sekwati Ramonyai - 417416
10463	R	Emergency brake released.	OK		Sekwati Ramonyai - 417416
10464	A	Remove active cab on TC2	OK		Sekwati Ramonyai - 417416

10465	I	Stopping distance test in emergency brake condition at 100km/h TC1	OK		Sekwati Ramonyai - 417416
10466	A	Force [TT] SBK_BrakeDist = 0.0	OK		Sekwati Ramonyai - 417416
10467	A	Release [TT] SBK_BrakeDist	OK		Sekwati Ramonyai - 417416
10468	A	Active cab on TC1	OK		Sekwati Ramonyai - 417416
10469	A	With the Train Tracer, start to record the variables listed on Preparation topic above.	OK		Sekwati Ramonyai - 417416
10470	A	Set the Master Controller to "MAX TRACTION" position and accelerate the train up to 100±2 km/h.	OK		Sekwati Ramonyai - 417416
10471	A	Set the Master Controller to "OFF" position for 5 seconds and then push the emergency brake mushroom button until the train comes to a complete stop.	OK		Sekwati Ramonyai - 417416
10472	I	The stopping distance of the train in emergency brake condition shall not be greater than 400m.	OK		Sekwati Ramonyai - 417416
10473	R	Result Max [TT] SBK_BrakeDist : x <= 400	OK	306	Sekwati Ramonyai - 417416
10474	A	Take a screenshot of the recorded variables from TrainTracer and paste on the Brake Test Results Template	OK		Sekwati Ramonyai - 417416
10475	A	Use the Deceleration Calculation Template to calculate the deceleration	OK		Sekwati Ramonyai - 417416
10476	R	The mean deceleration rate must be at least 1,3m/s².	OK		Sekwati Ramonyai - 417416
10477	A	Release the emergency brake button 44S1	OK		Sekwati Ramonyai - 417416
10478	A	Reset the emergency brake by putting the direction switch in NEUTRAL position and again in FORWARD position	OK		Sekwati Ramonyai - 417416
10479	R	Emergency brake released	OK		Sekwati Ramonyai - 417416
10480	I	[PRASA-23-Val-3] - Coherence between the speed indicated on DDU screen and the speedometer	OK		Sekwati Ramonyai - 417416
10481	A	Set the Master Controller to "MAX TRACTION" position and accelerate the train up to 100 km/h.	OK		Sekwati Ramonyai - 417416

10482	A	Set the Master Controller to "OFF" position stabilizing the Train speed at 100 km/h.	OK		Sekwati Ramonyai - 417416
10483	A	Compare the speed indicated on DDU screen with the speed indicated on speedometer.	OK		Sekwati Ramonyai - 417416
10484	R	Speed from DDU Read Undefined Value : x (km/h)	OK	100	Sekwati Ramonyai - 417416
10485	R	Speed from Speedometer Read Undefined Value : x (km/h)	OK	100	Sekwati Ramonyai - 417416
10486	I	The difference between both speed indication shall not be higher than 3 km/h	OK		Sekwati Ramonyai - 417416
10487	A	Set the Master Controller to "MAX SERVICE BRAKE" position until the train comes to a complete stop.	OK		Sekwati Ramonyai - 417416
10488	R	The train slows down and stopped smoothly without jolts.	OK		Sekwati Ramonyai - 417416
10489	A	Set the master controller to OFF position	OK		Sekwati Ramonyai - 417416
10490	A	Put direction switch in NEUTRAL position	OK		Sekwati Ramonyai - 417416
10491	A	Remove active cab on TC1	OK		Sekwati Ramonyai - 417416
10492	I	Stopping distance test in emergency brake condition at 100km/h TC2	OK		Sekwati Ramonyai - 417416
10493	A	Force [TT] SBK_BrakeDist = 0.0	OK		Sekwati Ramonyai - 417416
10494	A	Release [TT] SBK_BrakeDist	OK		Sekwati Ramonyai - 417416
10495	A	Active cab on TC2	OK		Sekwati Ramonyai - 417416
10496	A	Set the Master Controller to "MAX TRACTION" position and accelerate the train up to 100±2 km/h.	OK		Sekwati Ramonyai - 417416
10497	A	Set the Master Controller to "OFF" position for 5 seconds and then push the emergency brake mushroom button until the train comes to a complete stop.	OK		Sekwati Ramonyai - 417416
10498	R	Result Max [TT] SBK_BrakeDist : x <= 400	OK	319	Sekwati Ramonyai - 417416
10499	A	Take a screenshot of the recorded variables from TrainTracer and paste on the Brake Test Results Template	OK		Sekwati Ramonyai - 417416

10500	A	Use the Deceleration Calculation Template to calculate the deceleration	OK		Sekwati Ramonyai - 417416
10501	R	The mean deceleration rate must be at least 1,3m/s².	OK		Sekwati Ramonyai - 417416
10502	A	Release the emergency brake button 44S1	OK		Sekwati Ramonyai - 417416
10503	A	Reset the emergency brake setting the direction switch (S2.2) to "NEUTRAL" position and then to "FORWARD" position again.	OK		Sekwati Ramonyai - 417416
10504	R	Emergency brake released.	OK		Sekwati Ramonyai - 417416
10505	I	[PRASA-23-Val-3] - Coherence between the speed indicated on DDU screen and the speedometer	OK		Sekwati Ramonyai - 417416
10506	A	Set the Master Controller to "MAX TRACTION" position and accelerate the train up to 100 km/h.	OK		Sekwati Ramonyai - 417416
10507	A	Set the Master Controller to "OFF" position stabilizing the Train speed at 100 km/h.	OK		Sekwati Ramonyai - 417416
10508	A	Compare the speed indicated on DDU screen with the speed indicated on speedometer.	OK		Sekwati Ramonyai - 417416
10509	R	Speed from DDU Read Undefined Value : x (km/h)	OK	100	Sekwati Ramonyai - 417416
10510	R	Speed from Speedometer Read Undefined Value : x (km/h)	OK	100	Sekwati Ramonyai - 417416
10511	R	The difference between both speed indication shall not be higher than 3 km/h.	OK		Sekwati Ramonyai - 417416
10512	A	Set the Master Controller to "MAX SERVICE BRAKE" position until the train comes to a complete stop.	OK		Sekwati Ramonyai - 417416
10513	R	The train slows down and stopped smoothly without jolts.	OK		Sekwati Ramonyai - 417416
10514	A	Remove the active cab on TC2	OK		Sekwati Ramonyai - 417416
10515	I	Events Review	OK		Sekwati Ramonyai - 417416
10516	A	On the DDU Event's screen, check if there are any events loaded	OK		Sekwati Ramonyai - 417416
10517	R	No Events have been loaded	OK		Sekwati Ramonyai - 417416

10518	I	If there are any faults which occurred during the test, please create an Event on AutoFIE for further investigation.	OK		Sekwati Ramonyai - 417416
10519	I	Train Odometer	OK		Sekwati Ramonyai - 417416
10520	R	Check the milage on the DDU maintenance screen, the value should be higher than the one recorded at the beginning on the test. Read Undefined Value : x (km)	OK	100	Sekwati Ramonyai - 417416
10521	I	Powerhour	OK		Sekwati Ramonyai - 417416
10522	R	Read Undefined Variable [TT] (MPU1)NET_CntrTMceUptimeValS	OK	136	Sekwati Ramonyai - 417416
10523	I	End of Test	OK		Sekwati Ramonyai - 417416

Section 2 – Report summaries

2.1 Vehicle information

Vehicle number : 234 - 216

2.2 Results status

Test Instruction Sheet	Compliant	Incomplete	Non-compliant
Acceptance Test	X		

2.3 Tools used

Function	Tool name	Tool number	Next Calibration date

2.4 Software configuration

Vehicle	Equipment	Expected version	Version loaded
Train			

2.5 Open Points

Event number	Test Instruction Sheet / Function	Instruction Number	Description	Comments

2.6 Validation

Function	Operator	Date	Signature
ACT	*Sekwati Ramonyai - 417416*	*25/07/2024*	*Signed Digitally*