

PROJECT	CUSTOMER	TRAIN
Xtrapolis-PRASA	PRASA	216 – ACT

RTR Acceptance Test on Customer Track TS216 Report  
 GIB0000006325



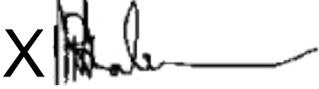
	CREATED	VERIFIED	APPROVED	DISTRIBUTION
<b>Name</b>	Neliswa MABUNDA	Sifiso LUKHELE	Kgomotso NKOANA	Confidentiality Category <i>Restricted</i> <i>Project</i> <i>Normal</i> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
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### Table of modifications

Rev	Date	Modifications Content	Writer
A0	06/05/2024	Creation	Neliswa MABUNDA

### Internal validations

	Name	Function	Date	Signature
<b>Creator</b>	Neliswa MABUNDA	EPU Manager	06/05/2024	X  Neliswa MABUNDA EPU Manager
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<b>Approver</b>	Khehla VEZI	PRASA Validation	06/05/2024	X  Khehla VEZI PRASA Validation

### Execution Plan

<b>Start Date</b>	30/04/2024
<b>End Date</b>	30/04/2024



Serial Tests Report  
TS216 – ACT  
RTR Acceptance Test Report

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## Section 1 – Purpose / Objectives

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## Section 3 – Acceptance Test

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### 3.3 Instructions list

### 3.3.1 ACT-Acceptance Test

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

N°	Type	Instruction	File	Result status	Result value	Operator	Vehicle
10001	I	Customer Acceptance Test		OK		Vincent Mlangeni - 475219	Train
10002	I	Static Tests		OK		Vincent Mlangeni - 475219	Train
10003	I	Automatic Train Preparation TC1		OK		Vincent Mlangeni - 475219	Train
10004	I	Train should be OFF		OK		Vincent Mlangeni - 475219	Train
10005	I	Backup Mode switch 27S1 should be in NORMAL position		OK		Vincent Mlangeni - 475219	Train
10006	A	Turn the Driver's Master Key to ON position		OK		Vincent Mlangeni - 475219	Train
10007	A	Close the battery contactor 18S1		OK		Vincent Mlangeni - 475219	Train
10008	R	After few minutes, the train is LV ready with TCMS available		OK		Vincent Mlangeni - 475219	Train
10009	R	The battery voltage is 110V on the line voltage indicator		OK		Vincent Mlangeni - 475219	Train
10010	A	Login on the ERTMS Screen as using the Driver's code 70787878		OK		Vincent Mlangeni - 475219	Train
10011	A	Enter the Train number		OK		Vincent Mlangeni - 475219	Train
10012	A	Launch the mission 8100 for Pretoria		OK		Vincent Mlangeni - 475219	Train
10013	R	The Train number and mission are displayed on the DDU screen		OK		Vincent Mlangeni - 475219	Train
10014	A	Press the automatic start button 20S1 or the virtual button on the DDU screen		OK		Vincent Mlangeni - 475219	Train
10015	R	The automatic start button 20S1 is flashing during the train preparation		OK		Vincent Mlangeni - 475219	Train
10016	R	On DDU screen, both pantographs are raised		OK		Vincent Mlangeni - 475219	Train

10017	R	Verify that both pantographs are raised when looking outside the train		OK		Vincent Mlangeni - 475219	Train
10018	R	On the Driver's desk, the button lamp of 21S1 is ON		OK		Vincent Mlangeni - 475219	Train
10019	R	On DDU screen, both HSCBs are closed		OK		Vincent Mlangeni - 475219	Train
10020	R	On the Driver's desk, the button lamp of HSCB closed 22S11 is ON		OK		Vincent Mlangeni - 475219	Train
10021	R	The automatic start button 20S1 stays ON after train preparation is complete		OK		Vincent Mlangeni - 475219	Train
10022	I	Train is in Prepared state		OK		Vincent Mlangeni - 475219	Train
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		Vincent Mlangeni - 475219	Train
10024	R	Line Voltage Result Min : 2700<= x (V)		OK	3249	Vincent Mlangeni - 475219	Train
10025	A	Check the pressure indicator on the pneumatic gauge are correctly set		OK		Vincent Mlangeni - 475219	Train
10026	R	The indicator for the Main pipe is Red and the brake pipe is Yellow		OK		Vincent Mlangeni - 475219	Train
10027	R	Note the distance travelled by the train on the DDU screen Read Undefined Value : x (km)		OK	44	Vincent Mlangeni - 475219	Train
10028	I	Train Status		OK		Vincent Mlangeni - 475219	Train
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		Vincent Mlangeni - 475219	Train
10030	R	Train is on standstill		OK		Vincent Mlangeni - 475219	Train
10031	A	Check the Events screen on the DDU		OK		Vincent Mlangeni - 475219	Train
10032	R	No faults have been logged on the events list		OK		Vincent Mlangeni - 475219	Train
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 performances of the train. If not, create an event on AutoFIE for the events listed on the train for further investigation		OK		Vincent Mlangeni - 475219	Train

10034	I	Quality Inspection		OK		Vincent Mlangeni - 475219	Train
10035	I	Outside Train		OK		Vincent Mlangeni - 475219	Train
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 equipments are correctly mounted		OK		Vincent Mlangeni - 475219	Train
10037	R	No abnormal noise or equipments which are not correctly mounted		OK		Vincent Mlangeni - 475219	Train
10038	I	If anything is noted during the train walk, please create an Event on AutoFIE for all defects for further investigation		OK		Vincent Mlangeni - 475219	Train
10039	R	All exterior pacis displays are working		OK		Vincent Mlangeni - 475219	Train
10040	I	Inside Train		OK		Vincent Mlangeni - 475219	Train
10041	A	Talk a walk inside the train and verify the correct operation of all subsystems		OK		Vincent Mlangeni - 475219	Train
10042	R	All internal pacis displays are working and the mission can be seen on the display		OK		Vincent Mlangeni - 475219	Train
10043	R	Internal lights are ON in all cars in 100% brightness, all LEDs are working in each light panel		OK		Vincent Mlangeni - 475219	Train
10044	R	There is no component with defect inside the train		OK		Vincent Mlangeni - 475219	Train
10045	I	HVAC System		OK		Vincent Mlangeni - 475219	Train
10046	A	Launch the HVAC auto-test for all cars one by one on the DDU screen		OK		Vincent Mlangeni - 475219	Train
10047	R	The HVAC is cooling, Ventilating and Heating in all cars including the Cabin		OK		Vincent Mlangeni - 475219	Train
10048	R	No faults are reported on the DDU event's list from the HVAC system		OK		Vincent Mlangeni - 475219	Train
10049	I	Doors command TC1		OK		Vincent Mlangeni - 475219	Train
10050	I	Door status on DDU screen		OK		Vincent Mlangeni - 475219	Train
10051	A	Put the Door Auth Switch 50S7 in DRIVER position		OK		Vincent Mlangeni - 475219	Train

10052	A	Put the switch 30S1 in Depot Driving mode		OK		Vincent Mlangeni - 475219	Train
10053	R	All doors are closed and indicated in BLUE color on the DDU screen		OK		Vincent Mlangeni - 475219	Train
10054	A	Press the DOOR AUTH left button 50S5		OK		Vincent Mlangeni - 475219	Train
10055	A	Press the DOOR OPEN left button 50S1		OK		Vincent Mlangeni - 475219	Train
10056	A	Press the DOOR AUTH right button 50S6		OK		Vincent Mlangeni - 475219	Train
10057	A	Press the DOOR OPEN right button 50S2		OK		Vincent Mlangeni - 475219	Train
10058	R	All doors are open and indicated in WHITE color on the DDU screen		OK		Vincent Mlangeni - 475219	Train
10059	A	Walk around the train to verify that all doors are physically open		OK		Vincent Mlangeni - 475219	Train
10060	R	All doors are open		OK		Vincent Mlangeni - 475219	Train
10061	A	Press the DOOR CLOSE left button 50S3		OK		Vincent Mlangeni - 475219	Train
10062	A	Press the DOOR CLOSE right button 50S4		OK		Vincent Mlangeni - 475219	Train
10063	R	All doors are closed and indicated in BLUE color on the DDU screen		OK		Vincent Mlangeni - 475219	Train
10064	A	Walk around the train to verify that all doors are physically closed		OK		Vincent Mlangeni - 475219	Train
10065	R	All doors are closed		OK		Vincent Mlangeni - 475219	Train
10066	I	External Lighting and Signalling TC1		OK		Vincent Mlangeni - 475219	Train
10067	I	The light status should be verified in both TC cars (front and back) in each case		OK		Vincent Mlangeni - 475219	Train
10068	R	Check white light 70H11 is ON (TC1 car).		OK		Vincent Mlangeni - 475219	Train
10069	R	Check red light 70H11 is OFF. Left side of the car (TC1 car).		OK		Vincent Mlangeni - 475219	Train
10070	R	Check white lights 70H5 and 70H6 are ON (TC1 car).		OK		Vincent Mlangeni - 475219	Train
10071	R	Check red lights 70H7 and 70H9 are OFF (TC1 car).		OK		Vincent Mlangeni - 475219	Train

10072	R	Check white light 70H11 is OFF (TC2 car).		OK		Vincent Mlangeni - 475219	Train
10073	R	Check red light 70H11 is ON. Left side of the car (TC2 car).		OK		Vincent Mlangeni - 475219	Train
10074	R	Check white lights 70H5 and 70H6 are OFF (TC2 car).		OK		Vincent Mlangeni - 475219	Train
10075	R	Check red lights 70H7 and 70H9 are ON (TC2 car).		OK		Vincent Mlangeni - 475219	Train
10076	R	Check Headlights 70H3 and 70H4 are OFF (TC2 car).		OK		Vincent Mlangeni - 475219	Train
10077	A	Press button 70S2 to activate Bright Headlight		OK		Vincent Mlangeni - 475219	Train
10078	R	White light 70H3 and 70H4 are in bright mode		OK		Vincent Mlangeni - 475219	Train
10079	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		Vincent Mlangeni - 475219	Train
10080	A	Press button 70S2 to activate Dimmed Headlight		OK		Vincent Mlangeni - 475219	Train
10081	R	White light 70H3 and 70H4 are in dimmed mode		OK		Vincent Mlangeni - 475219	Train
10082	R	Verify label on the Driver's desk		OK		Vincent Mlangeni - 475219	Train
10083	A	Press and maintain the whistle button 71S1		OK		Vincent Mlangeni - 475219	Train
10084	R	The whistle can be heard on TC1 cab		OK		Vincent Mlangeni - 475219	Train
10085	A	Release the whistle button 71S1		OK		Vincent Mlangeni - 475219	Train
10086	R	The whistle stops		OK		Vincent Mlangeni - 475219	Train
10087	A	Press the foot pedal and maintain it		OK		Vincent Mlangeni - 475219	Train
10088	R	The high pitch horn can be heard within 100m distance		OK		Vincent Mlangeni - 475219	Train
10089	A	Release the foot pedal		OK		Vincent Mlangeni - 475219	Train
10090	R	The high pitch horn stops		OK		Vincent Mlangeni - 475219	Train

10091	A	Press the DOOR AUTH LEFT button 50S5		OK		Vincent Mlangeni - 475219	Train
10092	A	Turn the switch 70S10 to open the left mirror and maintain it		OK		Vincent Mlangeni - 475219	Train
10093	R	The mirror opens wide enough to show the full platform and the glass is not blurry		OK		Vincent Mlangeni - 475219	Train
10094	A	Release the switch 70S10		OK		Vincent Mlangeni - 475219	Train
10095	R	The mirror returns to the closed position		OK		Vincent Mlangeni - 475219	Train
10096	A	Press the DOOR AUTH RIGHT button 50S6		OK		Vincent Mlangeni - 475219	Train
10097	A	Turn the switch 70S10 to open the right mirror and maintain it		OK		Vincent Mlangeni - 475219	Train
10098	R	The mirror opens wide enough to show the full platform and the glass is not blurry		OK		Vincent Mlangeni - 475219	Train
10099	A	Release the switch 70S10		OK		Vincent Mlangeni - 475219	Train
10100	R	The mirror returns to the closed position		OK		Vincent Mlangeni - 475219	Train
10101	A	Press the door close left button 50S3		OK		Vincent Mlangeni - 475219	Train
10102	A	Press the door close right button 50S4		OK		Vincent Mlangeni - 475219	Train
10103	I	Pre-departure tests TC1		OK		Vincent Mlangeni - 475219	Train
10104	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		Vincent Mlangeni - 475219	Train
10105	R	After the brake test has been completed, the test indicates as passed on DDU screen		OK		Vincent Mlangeni - 475219	Train
10106	R	No brake faults have been loaded on the event's list on the DDU screen		OK		Vincent Mlangeni - 475219	Train
10107	A	On the DDU screen, press the Traction Test virtual button and follow the steps to run the traction test		OK		Vincent Mlangeni - 475219	Train
10108	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		Vincent Mlangeni - 475219	Train

10109	A	Turn the battery contactor 18S1 to OFF position		OK		Vincent Mlangeni - 475219	Train
10110	A	Wait at least 1 minute for Pacis system to completely shutdown		OK		Vincent Mlangeni - 475219	Train
10111	R	Verify that the ACU agate is OFF in TC1		OK		Vincent Mlangeni - 475219	Train
10112	A	Turn the battery contactor 18S1 to ON position		OK		Vincent Mlangeni - 475219	Train
10113	A	After TCMS initialisation, press the automatic start button 20S1		OK		Vincent Mlangeni - 475219	Train
10114	R	After few minutes, the train is in Prepared state		OK		Vincent Mlangeni - 475219	Train
10115	A	Login on the ERTMS Screen as using the Driver's code 70787878		OK		Vincent Mlangeni - 475219	Train
10116	A	Enter the Train number		OK		Vincent Mlangeni - 475219	Train
10117	A	Launch the mission 8100 for Pretoria		OK		Vincent Mlangeni - 475219	Train
10118	R	The Train number and mission are displayed on the DDU screen		OK		Vincent Mlangeni - 475219	Train
10119	I	UHF Radio Test TC1		OK		Vincent Mlangeni - 475219	Train
10120	A	Enter train number "91001" and press select		OK		Vincent Mlangeni - 475219	Train
10121	R	The Radio displays "D 9900" and the network bars are visible		OK		Vincent Mlangeni - 475219	Train
10122	A	Dial " 204 2001 203" and press the PTT key to call the Metro base station in Johannesburg		OK		Vincent Mlangeni - 475219	Train
10123	R	The radio displays a calling screen, with a 4 minute timer		OK		Vincent Mlangeni - 475219	Train
10124	A	Listen for a response, Identify yourself and request a call back to verify that the radio can receive calls. End the call		OK		Vincent Mlangeni - 475219	Train
10125	R	The Radio can make a call and communication is clear		OK		Vincent Mlangeni - 475219	Train

10126	A	Answer the incoming call, Identify yourself and end the call		OK		Vincent Mlangeni - 475219	Train
10127	R	The Radio can receive a call and communication is clear		OK		Vincent Mlangeni - 475219	Train
10128	I	GSM Radio Test TC1					
10129	A	On the GSM cab radio, verify radio is not faulty and the network is available					
10130	A	Initiate a call by dialling the phone number provided by the Prasa personnel available during ACT to communicate with the Prasa ground station					
10131	R	When call has been received at the Prasa station, Identify yourself and verify communication is clear during the call					
10132	A	Request permission to use the Mainline for Acceptance test		OK		Vincent Mlangeni - 475219	Train
10133	R	Permission to use the Mainline for Acceptance test has been granted		OK		Vincent Mlangeni - 475219	Train
10134	A	Turn the battery contactor 18S1 to OFF position		OK		Vincent Mlangeni - 475219	Train
10135	I	Automatic Train Preparation TC2		OK		Vincent Mlangeni - 475219	Train
10136	I	Train should be OFF		OK		Vincent Mlangeni - 475219	Train
10137	I	Backup Mode switch 27S1 should be in NORMAL position		OK		Vincent Mlangeni - 475219	Train
10138	A	Turn the Driver's Master Key to ON position		OK		Vincent Mlangeni - 475219	Train
10139	A	Close the battery contactor 18S1		OK		Vincent Mlangeni - 475219	Train
10140	R	After few minutes, the train is LV ready with TCMS available		OK		Vincent Mlangeni - 475219	Train
10141	R	The battery voltage is 110V on the line voltage indicator		OK		Vincent Mlangeni - 475219	Train
10142	A	Login on the ERTMS Screen as using the Driver's code 70787878		OK		Vincent Mlangeni - 475219	Train

10143	A	Enter the Train number		OK		Vincent Mlangeni - 475219	Train
10144	A	Launch the mission 8100 for Pretoria		OK		Vincent Mlangeni - 475219	Train
10145	R	The Train number and mission are displayed on the DDU screen		OK		Vincent Mlangeni - 475219	Train
10146	A	Press the automatic start button 20S1 or the virtual button on the DDU screen		OK		Vincent Mlangeni - 475219	Train
10147	R	The automatic start button 20S1 is flashing during the train preparation		OK		Vincent Mlangeni - 475219	Train
10148	R	On DDU screen, both pantographs are raised		OK		Vincent Mlangeni - 475219	Train
10149	R	Verify that both pantographs are raised when looking outside the train		OK		Vincent Mlangeni - 475219	Train
10150	R	On the Driver's desk, the button lamp of 21S1 is ON		OK		Vincent Mlangeni - 475219	Train
10151	R	On DDU screen, both HSCBs are closed		OK		Vincent Mlangeni - 475219	Train
10152	R	On the Driver's desk, the button lamp of HSCB closed 22S11 is ON		OK		Vincent Mlangeni - 475219	Train
10153	R	The automatic start button 20S1 stays ON after train preparation is complete		OK		Vincent Mlangeni - 475219	Train
10154	I	Train is in Prepared state		OK		Vincent Mlangeni - 475219	Train
10155	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		Vincent Mlangeni - 475219	Train
10156	R	Line Voltage Result Min : 2700<= x (V)		OK	3327	Vincent Mlangeni - 475219	Train
10157	A	Check the pressure indicator on the pneumatic gauge are correctly set		OK		Vincent Mlangeni - 475219	Train
10158	R	The indicator for the Main pipe is Red and the brake pipe is Yellow		OK		Vincent Mlangeni - 475219	Train
10159	I	Doors command TC2		OK		Vincent Mlangeni - 475219	Train
10160	I	Door status on DDU screen		OK		Vincent Mlangeni - 475219	Train
10161	A	Put the Door Auth Switch 50S7 in DRIVER position		OK		Vincent Mlangeni - 475219	Train

10162	A	Put the switch 30S1 in Depot Driving mode		OK		Vincent Mlangeni - 475219	Train
10163	R	All doors are closed and indicated in BLUE colour on the DDU screen		OK		Vincent Mlangeni - 475219	Train
10164	A	Press the DOOR AUTH left button 50S5		OK		Vincent Mlangeni - 475219	Train
10165	A	Press the DOOR OPEN left button 50S1		OK		Vincent Mlangeni - 475219	Train
10166	A	Press the DOOR AUTH right button 50S6		OK		Vincent Mlangeni - 475219	Train
10167	A	Press the DOOR OPEN right button 50S2		OK		Vincent Mlangeni - 475219	Train
10168	R	All doors are open and indicated in WHITE color on the DDU screen		OK		Vincent Mlangeni - 475219	Train
10169	A	Press the DOOR CLOSE left button 50S3		OK		Vincent Mlangeni - 475219	Train
10170	A	Press the DOOR CLOSE right button 50S4		OK		Vincent Mlangeni - 475219	Train
10171	R	All doors are closed and indicated in BLUE color on the DDU screen		OK		Vincent Mlangeni - 475219	Train
10172	I	External Lighting and Signalling TC2		OK		Vincent Mlangeni - 475219	Train
10173	I	The light status should be verified in both TC cars (front and back) in each case		OK		Vincent Mlangeni - 475219	Train
10174	R	Check white light 70H11 is ON (TC2 car)		OK		Vincent Mlangeni - 475219	Train
10175	R	Check red light 70H11 is OFF. Left side of the car (TC2 car)		OK		Vincent Mlangeni - 475219	Train
10176	R	Check white lights 70H5 and 70H6 are ON (TC2 car)		OK		Vincent Mlangeni - 475219	Train
10177	R	Check red lights 70H7 and 70H9 are OFF (TC2 car).		OK		Vincent Mlangeni - 475219	Train
10178	R	Check white light 70H11 is OFF (TC1 car)		OK		Vincent Mlangeni - 475219	Train
10179	R	Check red light 70H11 is ON. Left side of the car (TC1 car)		OK		Vincent Mlangeni - 475219	Train
10180	R	Check white lights 70H5 and 70H6 are OFF (TC1 car)		OK		Vincent Mlangeni - 475219	Train

10181	R	Check red lights 70H7 and 70H9 are ON (TC1 car)		OK		Vincent Mlangeni - 475219	Train
10182	R	Check Headlights 70H3 and 70H4 are OFF (TC1 car)		OK		Vincent Mlangeni - 475219	Train
10183	A	Press button 70S2 to activate Bright Headlight		OK		Vincent Mlangeni - 475219	Train
10184	R	White light 70H3 and 70H4 are in bright mode		OK		Vincent Mlangeni - 475219	Train
10185	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		Vincent Mlangeni - 475219	Train
10186	A	Press button 70S2 to activate Dimmed Headlight		OK		Vincent Mlangeni - 475219	Train
10187	R	White light 70H3 and 70H4 are in dimmed mode		OK		Vincent Mlangeni - 475219	Train
10188	R	Verify label on the Driver's desk		OK		Vincent Mlangeni - 475219	Train
10189	A	Press and maintain the whistle button 71S1		OK		Vincent Mlangeni - 475219	Train
10190	R	The whistle can be heard on TC1 cab		OK		Vincent Mlangeni - 475219	Train
10191	A	Release the whistle button 71S1		OK		Vincent Mlangeni - 475219	Train
10192	R	The whistle stops		OK		Vincent Mlangeni - 475219	Train
10193	A	Press the foot pedal and maintain it		OK		Vincent Mlangeni - 475219	Train
10194	R	The high pitch horn can be heard within 100m distance		OK		Vincent Mlangeni - 475219	Train
10195	A	Release the foot pedal		OK		Vincent Mlangeni - 475219	Train
10196	R	The high pitch horn stops		OK		Vincent Mlangeni - 475219	Train
10197	A	Press the DOOR AUTH LEFT button 50S5		OK		Vincent Mlangeni - 475219	Train
10198	A	Turn the switch 70S10 to open the left mirror and maintain it		OK		Vincent Mlangeni - 475219	Train
10199	R	The mirror opens wide enough to show the full platform and the glass is not blurry		OK		Vincent Mlangeni - 475219	Train

10200	A	Release the switch 70S10		OK		Vincent Mlangeni - 475219	Train
10201	R	The mirror returns to the closed position		OK		Vincent Mlangeni - 475219	Train
10202	A	Press the DOOR AUTH RIGHT button 50S6		OK		Vincent Mlangeni - 475219	Train
10203	A	Turn the switch 70S10 to open the right mirror and maintain it		OK		Vincent Mlangeni - 475219	Train
10204	R	The mirror opens wide enough to show the full platform and the glass is not blurry		OK		Vincent Mlangeni - 475219	Train
10205	A	Release the switch 70S10		OK		Vincent Mlangeni - 475219	Train
10206	R	The mirror returns to the closed position		OK		Vincent Mlangeni - 475219	Train
10217	A	Press the door close left button 50S3		OK		Vincent Mlangeni - 475219	Train
10208	A	Press the door close right button 50S4		OK		Vincent Mlangeni - 475219	Train
10209	I	Pre-departure tests TC2		OK		Vincent Mlangeni - 475219	Train
10210	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		Vincent Mlangeni - 475219	Train
10211	R	After the brake test has been completed, the test indicates as passed on DDU screen		OK		Vincent Mlangeni - 475219	Train
10212	R	No brake faults have been loaded on the event's list on the DDU screen		OK		Vincent Mlangeni - 475219	Train
10213	A	On the DDU screen, press the Traction Test virtual button and follow the steps to run the traction test		OK		Vincent Mlangeni - 475219	Train
10214	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		Vincent Mlangeni - 475219	Train
10215	A	Turn the battery contactor 18S1 to OFF position		OK		Vincent Mlangeni - 475219	Train
10216	A	Wait at least 1 minute for Pacis system to completely shutdown		OK		Vincent Mlangeni - 475219	Train
10217	R	Verify that the ACU agate is OFF in TC2		OK		Vincent Mlangeni - 475219	Train

10218	A	Turn the battery contactor 18S1 to ON position		OK		Vincent Mlangeni - 475219	Train
10219	A	After TCMS initialisation, press the automatic start button 20S1		OK		Vincent Mlangeni - 475219	Train
10220	R	After few minutes, the train is in Prepared state		OK		Vincent Mlangeni - 475219	Train
10221	A	Login on the ERTMS Screen as using the Driver's code 12345612		OK		Vincent Mlangeni - 475219	Train
10222	A	Enter the Train number		OK		Vincent Mlangeni - 475219	Train
10223	A	Launch the mission 8100 for Pretoria		OK		Vincent Mlangeni - 475219	Train
10224	R	The Train number and mission are displayed on the DDU screen		OK		Vincent Mlangeni - 475219	Train
10225	I	UHF Radio Test TC2		OK		Vincent Mlangeni - 475219	Train
10226	A	Enter train number "91001" and press select		OK		Vincent Mlangeni - 475219	Train
10227	R	The Radio displays "D 9900" and the network bars are visible		OK		Vincent Mlangeni - 475219	Train
10228	A	Dial " 204 2001 203" and press the PTT key to call the Metro base station in Johannesburg		OK		Vincent Mlangeni - 475219	Train
10229	R	The radio displays a calling screen, with a 4 minute timer		OK		Vincent Mlangeni - 475219	Train
10230	A	Listen for a response, Identify yourself and request a call back to verify that the radio can receive calls. End the call		OK		Vincent Mlangeni - 475219	Train
10231	R	The Radio can make a call and communication is clear		OK		Vincent Mlangeni - 475219	Train
10232	A	Answer the incoming call, Identify yourself and end the call		OK		Vincent Mlangeni - 475219	Train
10233	R	The Radio can receive a call and communication is clear		OK		Vincent Mlangeni - 475219	Train
10234	I	GSM Radio Test TC2					

10235	A	On the GSM cab radio, verify radio is not faulty and the network is available					
10236	A	Initiate a call by dialling the phone number provided by the Prasa personnel available during ACT to communicate with the Prasa ground station.					
10237	R	When call has been received at the Prasa station, Identify yourself and verify communication is clear during the call					
10238	A	Turn the battery contactor 18S1 to OFF position		OK		Vincent Mlangeni - 475219	Train
10239	A	Remove active cab on TC2		OK		Vincent Mlangeni - 475219	Train
10240	I	Dynamic Test		OK		Vincent Mlangeni - 475219	Train
10241	I	Initial conditions		OK		Vincent Mlangeni - 475219	Train
10242	I	The tests shall be done under dry and calm weather conditions.		OK		Vincent Mlangeni - 475219	Train
10243	I	Traction and Braking tests shall be carried out on a straight (R $\geq$ 700m) well bedded level track (maximum gradient $\leq$ 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		Vincent Mlangeni - 475219	Train
10244	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		Vincent Mlangeni - 475219	Train
10245	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		Vincent Mlangeni - 475219	Train
10246	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		Vincent Mlangeni - 475219	Train

10247	I	The tests shall be performed in M1 load condition (mass per vehicle with all equipment).		OK		Vincent Mlangeni - 475219	Train
10248	I	Preparation for Traction and Braking tests		OK		Vincent Mlangeni - 475219	Train
10249	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		Vincent Mlangeni - 475219	Train
10250	A	Use the following attached document to calculate the Acceleration for each speed		OK		Vincent Mlangeni - 475219	Train
10251	A	Use the following attached document to save all the curves for each speed		OK		Vincent Mlangeni - 475219	Train
10252	A	Prepare the train with active cab on TC1		OK		Vincent Mlangeni - 475219	Train
10253	A	Verify that the emergency brake mushroom buttons "44S1" are released in both cabs.		OK		Vincent Mlangeni - 475219	Train
10254	A	Set the Master Controller to "OFF" position.		OK		Vincent Mlangeni - 475219	Train
10255	A	Turn the ERTMS Isolation switch (62S1) to the "ISOLATION" position in TC1 cab.		OK		Vincent Mlangeni - 475219	Train
10256	A	Set the Driving Mode Switch to "EFFORT" position in TC1 cab.		OK		Vincent Mlangeni - 475219	Train
10257	A	Set the Driving Direction Switch to "FORWARD" position.		OK		Vincent Mlangeni - 475219	Train
10258	R	Traction system is enabled to start the test.		OK		Vincent Mlangeni - 475219	Train
10259	I	Stopping distance test in emergency brake condition at 120km/h TC1		OK		Vincent Mlangeni - 475219	Train
10260	A	Force [TT] SBK_BrakeDist = 0.0		OK		Vincent Mlangeni - 475219	Train
10261	A	Release [TT] SBK_BrakeDist		OK		Vincent Mlangeni - 475219	Train

10262	A	With the Train Tracer, start to record the variables listed on Preparation topic above.		OK		Vincent Mlangeni - 475219	Train
10263	A	Set the Master Controller to "MAX TRACTION" position and accelerate the train up to 120±2 km/h.		OK		Vincent Mlangeni - 475219	Train
10264	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		Vincent Mlangeni - 475219	Train
10265	A	Stop the Train Tracer recording process.		OK		Vincent Mlangeni - 475219	Train
10266	I	The stopping distance of the train in emergency brake condition shall not be greater than 480m.		OK		Vincent Mlangeni - 475219	Train
10267	R	Result Max [TT] SBK_BrakeDist : $x \leq 480$		OK	450	Vincent Mlangeni - 475219	Train
10268	A	Take a screenshot of the recorded variables from TrainTracer and paste on the Brake Test Results Template		OK		Vincent Mlangeni - 475219	Train
10269	A	Use the Deceleration Calculation Template to calculate the deceleration		OK		Vincent Mlangeni - 475219	Train
10270	R	The mean deceleration rate must be at least 1,3m/s <sup>2</sup> .		OK		Vincent Mlangeni - 475219	Train
10271	A	Normalize the emergency brake mushroom button.		OK		Vincent Mlangeni - 475219	Train
10272	A	Reset the emergency brake setting the direction switch (S2.2) to "NEUTRAL" position and then to "FORWARD" position again.		OK		Vincent Mlangeni - 475219	Train
10273	R	Emergency brake released.		OK		Vincent Mlangeni - 475219	Train
10274	A	Remove active cab on TC1		OK		Vincent Mlangeni - 475219	Train
10275	I	Stopping distance test in emergency brake condition at 120km/h TC2		OK		Vincent Mlangeni - 475219	Train
10276	A	Force [TT] SBK_BrakeDist = 0.0		OK		Vincent Mlangeni - 475219	Train
10277	A	Release [TT] SBK_BrakeDist		OK		Vincent Mlangeni - 475219	Train

10278	A	Active cab on TC2		OK		Vincent Mlangeni - 475219	Train
10279	A	With the Train Tracer, start to record the variables listed on Preparation topic above.		OK		Vincent Mlangeni - 475219	Train
10280	A	Set the Master Controller to "MAX TRACTION" position and accelerate the train up to 120±2 km/h.		OK		Vincent Mlangeni - 475219	Train
10281	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		Vincent Mlangeni - 475219	Train
10282	A	Stop the Train Tracer recording process.		OK		Vincent Mlangeni - 475219	Train
10283	I	The stopping distance of the train in emergency brake condition shall not be greater than 480m.		OK		Vincent Mlangeni - 475219	Train
10284	R	Result Max [TT] SBK_BrakeDist : $x \leq 480$		OK	457	Vincent Mlangeni - 475219	Train
10285	A	Take a screenshot of the recorded variables from TrainTracer and paste on the Brake Test Results Template		OK		Vincent Mlangeni - 475219	Train
10286	A	Use the Deceleration Calculation Template to calculate the deceleration		OK		Vincent Mlangeni - 475219	Train
10287	R	The mean deceleration rate must be at least 1,3m/s <sup>2</sup> .		OK		Vincent Mlangeni - 475219	Train
10288	A	Normalize the emergency brake mushroom button.		OK		Vincent Mlangeni - 475219	Train
10289	A	Reset the emergency brake setting the direction switch (S2.2) to "NEUTRAL" position and then to "FORWARD" position again.		OK		Vincent Mlangeni - 475219	Train
10290	R	Emergency brake released.		OK		Vincent Mlangeni - 475219	Train
10291	A	Remove active cab on TC2		OK		Vincent Mlangeni - 475219	Train
10292	I	Stopping distance test in emergency brake condition at 100km/h TC1		OK		Vincent Mlangeni - 475219	Train
10293	A	Force [TT] SBK_BrakeDist = 0.0		OK		Vincent Mlangeni - 475219	Train

10294	A	Release [TT] SBK_BrakeDist		OK		Vincent Mlangeni - 475219	Train
10295	A	Active cab on TC1		OK		Vincent Mlangeni - 475219	Train
10296	A	With the Train Tracer, start to record the variables listed on Preparation topic above.		OK		Vincent Mlangeni - 475219	Train
10297	A	Set the Master Controller to "MAX TRACTION" position and accelerate the train up to 100±2 km/h.		OK		Vincent Mlangeni - 475219	Train
10298	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		Vincent Mlangeni - 475219	Train
10299	I	The stopping distance of the train in emergency brake condition shall not be greater than 400m.		OK		Vincent Mlangeni - 475219	Train
10300	R	Result Max [TT] SBK_BrakeDist : $x \leq 400$		OK	306	Vincent Mlangeni - 475219	Train
10301	A	Take a screenshot of the recorded variables from TrainTracer and paste on the Brake Test Results Template		OK		Vincent Mlangeni - 475219	Train
10302	A	Use the Deceleration Calculation Template to calculate the deceleration		OK		Vincent Mlangeni - 475219	Train
10303	R	The mean deceleration rate must be at least 1,3m/s <sup>2</sup> .		OK		Vincent Mlangeni - 475219	Train
10304	A	Release the emergency brake button 44S1		OK		Vincent Mlangeni - 475219	Train
10305	A	Reset the emergency brake by putting the direction switch in NEUTRAL position and again in FORWARD position		OK		Vincent Mlangeni - 475219	Train
10306	R	Emergency brake released		OK		Vincent Mlangeni - 475219	Train
10307	I	[PRASA-23-Val-3] - Coherence between the speed indicated on DDU screen and the speedometer		OK		Vincent Mlangeni - 475219	Train
10308	A	Set the Master Controller to "MAX TRACTION" position and accelerate the train up to 100 km/h.		OK		Vincent Mlangeni - 475219	Train
10309	A	Set the Master Controller to "OFF" position stabilizing the Train speed at 100		OK		Vincent Mlangeni - 475219	Train

		km/h.					
10310	A	Compare the speed indicated on DDU screen with the speed indicated on speedometer.	OK			Vincent Mlangeni - 475219	Train
10311	R	Speed from DDU Read Undefined Value : x (km/h)	OK	100		Vincent Mlangeni - 475219	Train
10312	R	Speed from Speedometer Read Undefined Value : x (km/h)	OK	100		Vincent Mlangeni - 475219	Train
10313	I	The difference between both speed indication shall not be higher than 3 km/h	OK			Vincent Mlangeni - 475219	Train
10314	A	Set the Master Controller to "MAX SERVICE BRAKE" position until the train comes to a complete stop.	OK			Vincent Mlangeni - 475219	Train
10315	R	The train slows down and stopped smoothly without jolts.	OK			Vincent Mlangeni - 475219	Train
10316	A	Set the master controller to OFF position	OK			Vincent Mlangeni - 475219	Train
10317	A	Put direction switch in NEUTRAL position	OK			Vincent Mlangeni - 475219	Train
10318	A	Remove active cab on TC1	OK			Vincent Mlangeni - 475219	Train
10319	I	Stopping distance test in emergency brake condition at 100km/h TC2	OK			Vincent Mlangeni - 475219	Train
10320	A	Force [TT] SBK_BrakeDist = 0.0	OK			Vincent Mlangeni - 475219	Train
10321	A	Release [TT] SBK_BrakeDist	OK			Vincent Mlangeni - 475219	Train
10322	A	Active cab on TC2	OK			Vincent Mlangeni - 475219	Train
10323	A	Set the Master Controller to "MAX TRACTION" position and accelerate the train up to 100±2 km/h.	OK			Vincent Mlangeni - 475219	Train
10324	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			Vincent Mlangeni - 475219	Train
10325	R	Result Max [TT] SBK_BrakeDist : x <= 400	OK	315		Vincent Mlangeni - 475219	Train
10326	A	Take a screenshot of the recorded variables from TrainTracer and paste on the Brake Test Results Template	OK			Vincent Mlangeni - 475219	Train

10327	A	Use the Deceleration Calculation Template to calculate the deceleration		OK		Vincent Mlangeni - 475219	Train
10328	R	The mean deceleration rate must be at least 1,3m/s <sup>2</sup> .		OK		Vincent Mlangeni - 475219	Train
10329	A	Release the emergency brake button 44S1		OK		Vincent Mlangeni - 475219	Train
10330	A	Reset the emergency brake setting the direction switch (S2.2) to "NEUTRAL" position and then to "FORWARD" position again.		OK		Vincent Mlangeni - 475219	Train
10331	R	Emergency brake released.		OK		Vincent Mlangeni - 475219	Train
10332	I	[PRASA-23-Val-3] - Coherence between the speed indicated on DDU screen and the speedometer		OK		Vincent Mlangeni - 475219	Train
10333	A	Set the Master Controller to "MAX TRACTION" position and accelerate the train up to 100 km/h.		OK		Vincent Mlangeni - 475219	Train
10334	A	Set the Master Controller to "OFF" position stabilizing the Train speed at 100 km/h.		OK		Vincent Mlangeni - 475219	Train
10335	A	Compare the speed indicated on DDU screen with the speed indicated on speedometer.		OK		Vincent Mlangeni - 475219	Train
10336	R	Speed from DDU Read Undefined Value : x (km/h)		OK	100	Vincent Mlangeni - 475219	Train
10337	R	Speed from Speedometer Read Undefined Value : x (km/h)		OK	100	Vincent Mlangeni - 475219	Train
10338	R	The difference between both speed indication shall not be higher than 3 km/h.		OK		Vincent Mlangeni - 475219	Train
10339	A	Set the Master Controller to "MAX SERVICE BRAKE" position until the train comes to a complete stop.		OK		Vincent Mlangeni - 475219	Train
10340	R	The train slows down and stopped smoothly without jolts.		OK		Vincent Mlangeni - 475219	Train
10341	A	Remove the active cab on TC2		OK		Vincent Mlangeni - 475219	Train
10342	I	Train maximum speed and stopping distance test in normal brake condition at 120km/h TC1		OK		Vincent Mlangeni - 475219	Train

10343	A	Force [TT] SBK_BrakeDist = 0.0		OK		Vincent Mlangeni - 475219	Train
10344	A	Release [TT] SBK_BrakeDist		OK		Vincent Mlangeni - 475219	Train
10345	A	Active Cab on TC1		OK		Vincent Mlangeni - 475219	Train
10346	A	With the Train Tracer, start to record the variables listed on Preparation topic above.		OK		Vincent Mlangeni - 475219	Train
10347	A	Set the Master Controller to "MAX TRACTION" position and accelerate the train up to 120 km/h.		OK		Vincent Mlangeni - 475219	Train
10348	A	At 120km/h, keep the Master Controller in "MAX TRACTION" position accelerating the train up to a speed of 123km/h.		OK		Vincent Mlangeni - 475219	Train
10349	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 train comes to a complete stop.		OK		Vincent Mlangeni - 475219	Train
10350	A	Stop the Train Tracer recording process.		OK		Vincent Mlangeni - 475219	Train
10351	R	Result Max [TT] SBK_BrakeDist : $x \leq 680$		OK	565	Vincent Mlangeni - 475219	Train
10352	A	Check that the train reached a speed of 123km/h within approximately 4 seconds after reaching 120km/h.		OK		Vincent Mlangeni - 475219	Train
10353	R	Time to reach 123km/h from 120km/h is not higher than 4 seconds.		OK		Vincent Mlangeni - 475219	Train
10354	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		Vincent Mlangeni - 475219	Train
10355	A	Use the Deceleration Calculation Template to calculate the deceleration		OK		Vincent Mlangeni - 475219	Train
10356	R	The mean deceleration rate must be at least 0,9m/s <sup>2</sup> .		OK		Vincent Mlangeni - 475219	Train
10357	A	Remove active cab on TC1		OK		Vincent Mlangeni - 475219	Train
10358	I	Train maximum speed and stopping distance test in normal brake condition at		OK		Vincent Mlangeni - 475219	Train

		120km/h TC2					
10359	A	Force [TT] SBK_BrakeDist = 0.0		OK		Vincent Mlangeni - 475219	Train
10360	A	Release [TT] SBK_BrakeDist		OK		Vincent Mlangeni - 475219	Train
10361	A	Active cab on TC2		OK		Vincent Mlangeni - 475219	Train
10362	A	With the Train Tracer, start to record the variables listed on Preparation topic above.		OK		Vincent Mlangeni - 475219	Train
10363	A	Set the Master Controller to "MAX TRACTION" position and accelerate the train up to 120 km/h.		OK		Vincent Mlangeni - 475219	Train
10364	A	At 120km/h, keep the Master Controller in "MAX TRACTION" position accelerating the train up to a speed of 123km/h.		OK		Vincent Mlangeni - 475219	Train
10365	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 train comes to a complete stop.		OK		Vincent Mlangeni - 475219	Train
10366	A	Stop the Train Tracer recording process.		OK		Vincent Mlangeni - 475219	Train
10367	R	Result Max [TT] SBK_BrakeDist : $x \leq 680$		OK	566	Vincent Mlangeni - 475219	Train
10368	A	Check that the train reached a speed of 123km/h within approximately 4 seconds after reaching 120km/h.		OK		Vincent Mlangeni - 475219	Train
10369	R	Time to reach 123km/h from 120km/h is not higher than 4 seconds.		OK		Vincent Mlangeni - 475219	Train
10370	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		Vincent Mlangeni - 475219	Train
10371	A	Use the Deceleration Calculation Template to calculate the deceleration		OK		Vincent Mlangeni - 475219	Train
10372	R	The mean deceleration rate must be at least 0,9m/s <sup>2</sup> .		OK		Vincent Mlangeni - 475219	Train
10373	A	Remove active cab on TC2		OK		Vincent Mlangeni - 475219	Train

10374	I	Stopping distance test in normal brake condition at 100km/h TC1		OK		Vincent Mlangeni - 475219	Train
10375	A	Force [TT] SBK_BrakeDist = 0.0		OK		Vincent Mlangeni - 475219	Train
10376	A	Release [TT] SBK_BrakeDist		OK		Vincent Mlangeni - 475219	Train
10377	A	Active cab in TC1		OK		Vincent Mlangeni - 475219	Train
10378	A	Set the Master Controller to "MAX TRACTION" position and accelerate the train up to 100±2 km/h.		OK		Vincent Mlangeni - 475219	Train
10379	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		Vincent Mlangeni - 475219	Train
10380	R	Result Max [TT] SBK_BrakeDist : x <= 567		OK	391	Vincent Mlangeni - 475219	Train
10381	A	Take a screenshot of the recorded variables from TrainTracer and paste on the Brake Test Results Template.		OK		Vincent Mlangeni - 475219	Train
10382	A	Use the Deceleration Calculation Template to calculate the deceleration		OK		Vincent Mlangeni - 475219	Train
10383	A	Remove active cab on TC1		OK		Vincent Mlangeni - 475219	Train
10384	I	Stopping distance test in normal brake condition at 100km/h TC2		OK		Vincent Mlangeni - 475219	Train
10385	A	Force [TT] SBK_BrakeDist = 0.0		OK		Vincent Mlangeni - 475219	Train
10386	A	Release [TT] SBK_BrakeDist		OK		Vincent Mlangeni - 475219	Train
10387	A	Active cab in TC2		OK		Vincent Mlangeni - 475219	Train
10388	A	Set the Master Controller to "MAX TRACTION" position and accelerate the train up to 100±2 km/h.		OK		Vincent Mlangeni - 475219	Train
10389	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		Vincent Mlangeni - 475219	Train
10390	R	Result Max [TT] SBK_BrakeDist : x <= 567		OK	393	Vincent Mlangeni - 475219	Train

10391	A	Take a screenshot of the recorded variables from TrainTracer and paste on the Brake Test Results Template.		OK		Vincent Mlangeni - 475219	Train
10392	A	Use the Deceleration Calculation Template to calculate the deceleration		OK		Vincent Mlangeni - 475219	Train
10393	A	Remove active cab on TC2		OK		Vincent Mlangeni - 475219	Train
10394	I	Stopping distance test in degraded brake condition at 120km/h TC1		OK		Vincent Mlangeni - 475219	Train
10395	A	Active cab in TC1		OK		Vincent Mlangeni - 475219	Train
10396	I	Disabling the electrical braking in all motor cars.		OK		Vincent Mlangeni - 475219	Train
10397	A	Force [TT] (TBCU1)f55_b_br_auth = 0.0		OK		Vincent Mlangeni - 475219	Train
10398	A	Force [TT] (TBCU2)f55_b_br_auth = 0.0		OK		Vincent Mlangeni - 475219	Train
10399	A	Force [TT] (TBCU3)f55_b_br_auth = 0.0		OK		Vincent Mlangeni - 475219	Train
10400	A	Force [TT] (TBCU4)f55_b_br_auth = 0.0		OK		Vincent Mlangeni - 475219	Train
10401	R	Electrical braking is inhibited in all M cars		OK		Vincent Mlangeni - 475219	Train
10402	A	Force [TT] SBK_BrakeDist = 0.0		OK		Vincent Mlangeni - 475219	Train
10403	A	Release [TT] SBK_BrakeDist		OK		Vincent Mlangeni - 475219	Train
10404	A	With the Train Tracer, start to record the variables listed on Preparation topic above.		OK		Vincent Mlangeni - 475219	Train
10405	A	Set the Master Controller to "MAX TRACTION" position and accelerate the train up to 120±2 km/h.		OK		Vincent Mlangeni - 475219	Train
10406	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		Vincent Mlangeni - 475219	Train
10407	A	Stop the Train Tracer recording process.		OK		Vincent Mlangeni - 475219	Train
10408	R	Result Max [TT] SBK_BrakeDist : x <= 680		OK	657	Vincent Mlangeni - 475219	Train
10409	A	Take a screenshot of the recorded variables from TrainTracer and paste on		OK		Vincent Mlangeni - 475219	Train

		the Brake Test Results Template.				
10410	A	Use the Deceleration Calculation Template to calculate the deceleration		OK	Vincent Mlangeni - 475219	Train
10411	R	The mean deceleration rate must be at least 0,9m/s <sup>2</sup> .		OK	Vincent Mlangeni - 475219	Train
10412	I	Normalising the electrical braking on M cars		OK	Vincent Mlangeni - 475219	Train
10413	A	Put the direction selector switch in NEUTRAL position		OK	Vincent Mlangeni - 475219	Train
10414	A	Release [TT] (TBCU1)f55_b_br_auth		OK	Vincent Mlangeni - 475219	Train
10415	A	Release [TT] (TBCU2)f55_b_br_auth		OK	Vincent Mlangeni - 475219	Train
10416	A	Release [TT] (TBCU3)f55_b_br_auth		OK	Vincent Mlangeni - 475219	Train
10417	A	Release [TT] (TBCU4)f55_b_br_auth		OK	Vincent Mlangeni - 475219	Train
10418	A	Remove active cab on TC1		OK	Vincent Mlangeni - 475219	Train
10419	I	Stopping distance test in degraded brake condition at 120km/h TC2		OK	Vincent Mlangeni - 475219	Train
10420	A	Active cab on TC2		OK	Vincent Mlangeni - 475219	Train
10421	I	Disabling the electrical braking in all motor cars.		OK	Vincent Mlangeni - 475219	Train
10422	A	Force [TT] (TBCU1)f55_b_br_auth = 0.0		OK	Vincent Mlangeni - 475219	Train
10423	A	Force [TT] (TBCU2)f55_b_br_auth = 0.0		OK	Vincent Mlangeni - 475219	Train
10424	A	Force [TT] (TBCU3)f55_b_br_auth = 0.0		OK	Vincent Mlangeni - 475219	Train
10425	A	Force [TT] (TBCU4)f55_b_br_auth = 0.0		OK	Vincent Mlangeni - 475219	Train
10426	R	Electrical braking is inhibited in all M cars		OK	Vincent Mlangeni - 475219	Train
10427	A	Force [TT] SBK_BrakeDist = 0.0		OK	Vincent Mlangeni - 475219	Train
10428	A	Release [TT] SBK_BrakeDist		OK	Vincent Mlangeni - 475219	Train
10429	A	With the Train Tracer, start to record the variables listed on Preparation topic above.		OK	Vincent Mlangeni - 475219	Train

10430	A	Set the Master Controller to "MAX TRACTION" position and accelerate the train up to 120±2 km/h.		OK		Vincent Mlangeni - 475219	Train
10431	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		Vincent Mlangeni - 475219	Train
10432	A	Stop the Train Tracer recording process.		OK		Vincent Mlangeni - 475219	Train
10433	R	Result Max [TT] SBK_BrakeDist : x <= 680		OK	663	Vincent Mlangeni - 475219	Train
10434	A	Take a screenshot of the recorded variables from TrainTracer and paste on the Brake Test Results Template.		OK		Vincent Mlangeni - 475219	Train
10435	A	Use the Deceleration Calculation Template to calculate the deceleration		OK		Vincent Mlangeni - 475219	Train
10436	R	The mean deceleration rate must be at least 0,9m/s².		OK		Vincent Mlangeni - 475219	Train
10437	I	Normalizing the electrical braking on the Train.		OK		Vincent Mlangeni - 475219	Train
10438	A	Put the direction selector switch in NEUTRAL position		OK		Vincent Mlangeni - 475219	Train
10439	A	Release [TT] (TBCU1)f55_b_br_auth		OK		Vincent Mlangeni - 475219	Train
10440	A	Release [TT] (TBCU2)f55_b_br_auth		OK		Vincent Mlangeni - 475219	Train
10441	A	Release [TT] (TBCU3)f55_b_br_auth		OK		Vincent Mlangeni - 475219	Train
10442	A	Release [TT] (TBCU4)f55_b_br_auth		OK		Vincent Mlangeni - 475219	Train
10443	A	Remove active cab on TC2		OK		Vincent Mlangeni - 475219	Train
10444	I	Train running in ETCS level 0 TC1		OK		Vincent Mlangeni - 475219	Train
10445	A	Active cab on TC1		OK		Vincent Mlangeni - 475219	Train
10446	I	Take the Train till ERTMS zone and there the Train shall be turned off.		OK		Vincent Mlangeni - 475219	Train
10447	A	Push the Automatic Start Pushbutton (20S1) on the Driver Desk or virtual button on DDU Screen.		OK		Vincent Mlangeni - 475219	Train

10448	R	Train deprepared.		OK		Vincent Mlangeni - 475219	Train
10449	A	Turn Battery Contactor Switch (18S1) to "OFF" Position on TC1 Car.		OK		Vincent Mlangeni - 475219	Train
10450	R	Check on DDU SCREEN the message: "Shutdown In Progress".		OK		Vincent Mlangeni - 475219	Train
10451	R	In 30 seconds, Train will be completely OFF.		OK		Vincent Mlangeni - 475219	Train
10452	A	Turn the ERTMS Isolation switch (62S1) to the "NORMAL" position in TC1 and TC2 cabs.		OK		Vincent Mlangeni - 475219	Train
10453	A	Turn the Driver's Master key (30A1S1) into the "ON" position in the TC1 cab.		OK		Vincent Mlangeni - 475219	Train
10454	A	Turn Battery Contactor Switch (18S1) to "ON" Position on TC1 Car.		OK		Vincent Mlangeni - 475219	Train
10455	A	Wait until appears the Login screen on ERTMS DMI screen, and then enters the driver's identification number.		OK		Vincent Mlangeni - 475219	Train
10456	A	Select ETCS level 0.		OK		Vincent Mlangeni - 475219	Train
10457	A	On ERTMS DMI screen, enter the number of cars of the Train (6 cars).		OK		Vincent Mlangeni - 475219	Train
10458	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		Vincent Mlangeni - 475219	Train
10459	A	On ERTMS DMI screen, enter the respective Train Running Number.		OK		Vincent Mlangeni - 475219	Train
10460	A	Select start from main menu option 1 (ETCS should now be in unfitted mode).		OK		Vincent Mlangeni - 475219	Train
10461	I	In unfitted mode the ETCS speed protection mode is set to 100km/h.		OK		Vincent Mlangeni - 475219	Train
10462	A	Push the Automatic Start Pushbutton (20S1) on the Driver Desk or virtual button on DDU Screen.		OK		Vincent Mlangeni - 475219	Train
10463	R	Train in Prepared state with both Pantographs UP and both HSCBs closed.		OK		Vincent Mlangeni - 475219	Train

10464	A	Set the Driving Mode Switch to "EFFORT" position in TC1 cab.		OK		Vincent Mlangeni - 475219	Train
10465	A	Set the Driving Direction Switch to "FORWARD" position.		OK		Vincent Mlangeni - 475219	Train
10466	A	Accelerate the train to 100 km/h and continue to slowly to increase the speed (Note stay within allowed track speed).		OK		Vincent Mlangeni - 475219	Train
10467	R	When the Train speed overpass the warning speed of 104 km/h, a warning sound can be heard on active cab.		OK		Vincent Mlangeni - 475219	Train
10468	R	Full service brake applied on the Train by ERTMS because Train speed overpasses the service brake intervention curve calculated by ERTMS system.		OK		Vincent Mlangeni - 475219	Train
10469	R	The service brake is released below 100 km/h.		OK		Vincent Mlangeni - 475219	Train
10470	A	Set the Master Controller to "MAX TRACTION" position.		OK		Vincent Mlangeni - 475219	Train
10471	R	Train starts to run with max traction effort.		OK		Vincent Mlangeni - 475219	Train
10472	A	Continue increasing slowly the traction effort until the train applies full service brake by the ERTMS (around 106 km/h).		OK		Vincent Mlangeni - 475219	Train
10473	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		Vincent Mlangeni - 475219	Train
10474	R	Train comes to a complete stop and ERTMS brake Icon disappears from the DMI.		OK		Vincent Mlangeni - 475219	Train
10475	R	The pantographs are lowered and the HSCB are opened.		OK		Vincent Mlangeni - 475219	Train
10476	A	Raise the pantographs and close the HSCB by the automatic switch.		OK		Vincent Mlangeni - 475219	Train
10477	A	Reset the emergency brake setting the direction switch (S2.2) to "NEUTRAL" position and then to "FORWARD" position again.		OK		Vincent Mlangeni - 475219	Train

10478	A	Remove active cab on TC1		OK		Vincent Mlangeni - 475219	Train
10479	I	Train running in ETCS level 0 TC2		OK		Vincent Mlangeni - 475219	Train
10480	A	Active cab on TC2		OK		Vincent Mlangeni - 475219	Train
10481	A	Turn the ERTMS Isolation switch (62S1) to the "NORMAL" position in TC1 and TC2 cabs.		OK		Vincent Mlangeni - 475219	Train
10482	A	Wait until appears the Login screen on ERTMS DMI screen, and then enters the driver's identification number.		OK		Vincent Mlangeni - 475219	Train
10483	A	Select ETCS level 0.		OK		Vincent Mlangeni - 475219	Train
10484	A	On ERTMS DMI screen, enter the number of cars of the Train (6 cars).		OK		Vincent Mlangeni - 475219	Train
10485	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		Vincent Mlangeni - 475219	Train
10486	A	On ERTMS DMI screen, enter the respective Train Running Number.		OK		Vincent Mlangeni - 475219	Train
10487	A	Select start from main menu option 1 (ETCS should now be in unfitted mode).		OK		Vincent Mlangeni - 475219	Train
10488	I	The Train shall be turned off.		OK		Vincent Mlangeni - 475219	Train
10489	I	In unfitted mode the ETCS speed protection mode is set to 100km/h.		OK		Vincent Mlangeni - 475219	Train
10490	A	Push the Automatic Start Pushbutton (20S1) on the Driver Desk or virtual button on DDU Screen.		OK		Vincent Mlangeni - 475219	Train
10491	R	Train in Prepared state with both Pantographs UP and both HSCBs closed.		OK		Vincent Mlangeni - 475219	Train
10492	A	Set the Driving Mode Switch to "EFFORT" position in TC1 cab.		OK		Vincent Mlangeni - 475219	Train
10493	A	Set the Driving Direction Switch to "FORWARD" position.		OK		Vincent Mlangeni - 475219	Train
10494	A	Accelerate the train to 100 km/h and continue to slowly to increase the speed (Note stay within allowed track speed).		OK		Vincent Mlangeni - 475219	Train

10495	R	When the Train speed overpass the warning speed of 104 km/h, a warning sound can be heard on active cab.		OK		Vincent Mlangeni - 475219	Train
10496	R	Full service brake applied on the Train by ERTMS because Train speed overpasses the service brake intervention curve calculated by ERTMS system.		OK		Vincent Mlangeni - 475219	Train
10497	R	The service brake is released below 100 km/h.		OK		Vincent Mlangeni - 475219	Train
10498	A	Set the Master Controller to "MAX TRACTION" position.		OK		Vincent Mlangeni - 475219	Train
10499	R	Train starts to run with max traction effort.		OK		Vincent Mlangeni - 475219	Train
10500	A	Continue increasing slowly the traction effort until the train applies full service brake by the ERTMS (around 106 km/h).		OK		Vincent Mlangeni - 475219	Train
10501	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		Vincent Mlangeni - 475219	Train
10502	R	Train comes to a complete stop and ERTMS brake Icon disappears from the DMI.		OK		Vincent Mlangeni - 475219	Train
10503	R	The pantographs are lowered and the HSCB are opened.		OK		Vincent Mlangeni - 475219	Train
10504	A	Raise the pantographs and close the HSCB by the automatic switch.		OK		Vincent Mlangeni - 475219	Train
10505	A	Reset the emergency brake setting the direction switch (S2.2) to "NEUTRAL" position and then to "FORWARD" position again.		OK		Vincent Mlangeni - 475219	Train
10506	I	Events Review		OK		Vincent Mlangeni - 475219	Train
10507	A	On the DDU Event's screen, check if there are any events loaded		OK		Vincent Mlangeni - 475219	Train
10508	R	No Events have been loaded		OK		Vincent Mlangeni - 475219	Train
10509	I	If there are any faults which occurred during the test, please create an Event on		OK		Vincent Mlangeni - 475219	Train

		AutoFIE for further investigation.					
10510	I	Train Odometer		OK		Vincent Mlangeni - 475219	Train
10511	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	119	Vincent Mlangeni - 475219	Train
10512	I	Powerhour		OK		Vincent Mlangeni - 475219	Train
10513	R	Read Undefined Variable [TT] (MPU1)NET_CntrTMceUptimeVals		OK	106	Vincent Mlangeni - 475219	Train
10514	I	End of Test		OK		Vincent Mlangeni - 475219	Train



Serial Tests Report  
TS216 – ACT  
RTR Acceptance Test Report

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## Section 2 – Report summaries

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### 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

Vehicle	Equipment	Expected version	Version loaded
Train			