System Level Functional Test Cases				
#	**Test Scenario**	**Input Specification**	**Expected Output/Values**	**Observed Output (Pass/Fail)**
1.	To check the LEDs of all the modules showing healthy or not	LED indications of the modules shall be checked when the System is ON	2. VC Module i. Power LED shall be ON (Steady state) ii. HLT1 LED shall blink iii. HLT2 LED shall blink	
			3. PPC Module i. Power LED shall be ON (Steady state) ii. HLT1 LED shall blink iii. HLT2 LED shall blink iv. HLT3 LED shall blink v. HLT4 LED shall blink vi. Disconnect GPS Antenna then RGS LED should not glow. vii. Connect GPS Antenna. After getting GPS fix, then RGS LED will glow in steady state indicating GPS Antenna is working.	
			4. Voter Module i. Power LED shall be ON (Steady state) ii. HLT1 LED shall blink iii. HLT2 LED shall blink iv. HLT3 LED shall blink	
			5. GSM Module i. Power LED shall be ON (Steady state) ii. HLT1 LED shall blink iii. HLT2 LED shall blink	
			6. Scanner Module	

System Level Functional Test Cases				
#	Test Scenario	Input Specification	Expected Output/Values	Observed Output (Pass/Fail)
			i. Power LED shall be ON (Steady state) ii. All HLT LEDs shall blink	
			7. Vital Gateway Module iii. Power LED shall be ON (Steady state) iii. HLT LEDs shall blink	
2.	To check stationary TCAS shall perform automatic self-test when the equipment is switched ON.	5) Ensure Stationary TCAS is healthy. 6) Power ON the stationary TCAS. 7) Observe that Stationary TCAS shall perform automatic self-test at the time of power ON. 8) Check for self-test message onSM-OCIP.	3) "System OK" message shall be displayed on SM OCIP. 4) Health OK LED shall glow on SM-OCIP	
3.	To check Radio Communication through Radio modem-1 : Check for Radio communication when Radio modem-2 health of a StationTCAS Fails	3) When a STATIONARY TCASis healthy with both radios working. 4) Make Radio modem-2 faulty.	The Concerned Station packets should be available in every cycle and Stationary TCAS shall be in healthy state. This indicates that communication through Radio Modem-1 (Guardian-400) and Media Converter / OFC _Converter_RTU are working fine.	
4.	To check Radio Communication through Radio modem-2 : Check	3) When a STATIONARY TCASis healthy with both radios working. 4) Make Radio modem-1	The Concerned Station packets should be available in every cycle and Stationary TCAS shall be in healthy state. This indicates	

System Level Functional Test Cases				
#	Test Scenario	Input Specification	Expected Output/Values	Observed Output (Pass/Fail)
	for Radio communication when Radio modem-1 health of a Station TCAS Fails	faulty.	that communication through Radio Modem-2 (Guardian-400) and Media Converter / OFC _Converter_RTU are working fine.	
5.	Check for Mode transition of STATIONARY TCAS to fault mode when both radios health Fail	3) When STATIONARY TCAS is in Normal mode 4) Fail both Radio's(Radio made power off) 4) STATIONARY TCAS should transit toFault mode	RADIO fail fault should get declared and STACS should move to System failure Modeand Health Fail Led shall glow on SM-OCIP	
6.	To check generation and cancellation of manual SOS from SM-OCIP.	1) Press SOS + COMMON pushbuttons for SOS generation. 5) Press COMMON + CANCEL push buttons for removing SOS.	**Case1 :** When SM-OCIP key is in ON condition. 3) SOS + COMMON - SOS LED shall lit on SM- OCIP and SOS messages from station shall be displayed. Counter shall be incremented to next number. 4) COMMON + CANCEL - SOS LED shall not lit and SOS messages from station shall be removed on SM-OCIP. **Case 2 :** When SM-OCIP key is in OFF condition / removed. 2) SOS operations shall not be possible and no Change in counter number	
7.	In FS mode, MA is available, turnout data is received	4. Power on the system 5. Make sure that no faults are present in the Stationary TCAS and Loco is in FS	Turnout speed, distance to turnout message shall be displayed and Loco speed should be reduced to turnout speed limit.	

Signature of Firm's Representative with date and designation	Signature of RDSO Representative with date and designation

System Level Functional Test Cases				
#	Test Scenario	Input Specification	Expected Output/Values	Observed Output (Pass/Fail)
		mode. 6. Set the route for Loop line and simulate the position of Loco from rear of the signal post.		
8.	To check FS mode to OS mode transition when calling on signal is taken off	1. Make sure that train is in FS mode 2. Calling on signal is taken off. 3. OS MA received from the station.	Loco shall transit to OS mode and calling ON speed limit 15kmph shall be shown on DMI.	
9.	To check RIU / FIE shall scan field inputs data and communicate the status to STCAS over OFC channel	1) Set Relay status as Pickup in RIU/FIE Units	Respective RIU / FIE field input data show in Station TCAS Analyser application	
10.	To check the working of GSM Antenna	2) From a mobile handset send SMS message to the active GSM module SIM number. Use the test application in lap top /PC to retrieve the SMS message sent to The GSM module. The Laptop shall be connected to the Vital Gate Way Card of the STN TCAS.	The SMS message sent through mobile handset and that retrieved by the Laptop / PC application shall match	