

General	Sense & Control Scrutineering (Extending checks to existing scrutineering checklist)		
	Team:		
	Overall verdict (Passed?)	<input type="checkbox"/>	
Entry criteria	Pre Scrutineering done	<input type="checkbox"/>	
	Battery and low-voltage inspection done	<input type="checkbox"/>	
	Necessary safety equipment used/worn	<input type="checkbox"/>	
Procedures	Power on checked	<input type="checkbox"/>	
	Power off checked	<input type="checkbox"/>	
	State transitions check checked	<input type="checkbox"/>	
		Pod:	(If applicable): Active track
Prototype general safety	Is emergency control switch accessible for operator?	<input type="checkbox"/>	<input type="checkbox"/>
	Is the switch protected from accidental collisions?	<input type="checkbox"/>	<input type="checkbox"/>
	The demonstrator bears resemblance with the proposed FDD concept.	<input type="checkbox"/>	<input type="checkbox"/>
	Are system health LEDs visible without removing parts?	<input type="checkbox"/>	<input type="checkbox"/>
Prototype GUI	Safe range for monitored variables is clearly indicated.	<input type="checkbox"/>	<input type="checkbox"/>
	The demonstrator can break using a physical button of the Control Station.	<input type="checkbox"/>	<input type="checkbox"/>
	GUI monitors the speed of the demonstrator.	<input type="checkbox"/>	<input type="checkbox"/>
	GUI does not display outdated values.	<input type="checkbox"/>	<input type="checkbox"/>
	Stop command is implemented on the GUI.	<input type="checkbox"/>	<input type="checkbox"/>
	Person monitoring the speed of the demonstrator has quick access to the emergency breaks.	<input type="checkbox"/>	<input type="checkbox"/>
	Demonstrator's health must be visible to an external viewer using colored visual indicators.	<input type="checkbox"/>	<input type="checkbox"/>
	Test cut off battery command and verify correct result.	<input type="checkbox"/>	<input type="checkbox"/>
	Test emergency command and verify correct result.	<input type="checkbox"/>	<input type="checkbox"/>

Batteries	All safe actuations must be tested (brakes, contactors, relays, valves)	<input type="checkbox"/>	<input type="checkbox"/>
	The GUI logs individual cell voltage of 100% of low voltage Cells.	<input type="checkbox"/>	<input type="checkbox"/>
	The GUI logs data of at least 25% of cell temperatures.	<input type="checkbox"/>	<input type="checkbox"/>
	The GUI logs SOC of the low voltage battery.	<input type="checkbox"/>	<input type="checkbox"/>
	The GUI logs individual cell voltage of 100% of low voltage Cells.	<input type="checkbox"/>	<input type="checkbox"/>
System tests	The demonstrator enters Fault State after sensor disconnection	<input type="checkbox"/>	<input type="checkbox"/>
	Navigation sensor unplugged handled safely	<input type="checkbox"/>	<input type="checkbox"/>
	Sensor failures properly handled?	<input type="checkbox"/>	<input type="checkbox"/>
	The demonstrator enters Fault State after reading out-of-range values (provoke them by manipulating movement sensors. If not possible, the team is responsible for manually triggering the protection system with code.)	<input type="checkbox"/>	<input type="checkbox"/>
	The demonstrator breaks after entering Fault State	<input type="checkbox"/>	<input type="checkbox"/>
	The demonstrator opens relays after entering Fault State	<input type="checkbox"/>	<input type="checkbox"/>
	The demonstrator enters in Fault State after a disconnection.	<input type="checkbox"/>	<input type="checkbox"/>
	The demonstrator logs data in Fault State.	<input type="checkbox"/>	<input type="checkbox"/>
	The demonstrator can be restarted from Fault State.	<input type="checkbox"/>	<input type="checkbox"/>
	Wires connected properly of Sense & Control	<input type="checkbox"/>	<input type="checkbox"/>
	Sense & Control System safe in case of vibrations	<input type="checkbox"/>	<input type="checkbox"/>
	Sense & Control connectors make sure that no shorts/bad connections might occur	<input type="checkbox"/>	<input type="checkbox"/>
	Proper explanation of how system indicates end of run	<input type="checkbox"/>	<input type="checkbox"/>
	Proper explanation of how system that it has come to a stop	<input type="checkbox"/>	<input type="checkbox"/>
	System left stationary for longer time in initial state - is navigation and possible drift handled properly?	<input type="checkbox"/>	<input type="checkbox"/>

System is moved by hand - is navigation handled properly and state machine correct for this manual run? (NO HV, NO PRESSURE, just LV)	<input type="checkbox"/>	<input type="checkbox"/>
Will there not be any movement when the System is initially powered?	<input type="checkbox"/>	<input type="checkbox"/>
Made sure that pod will start braking at end of track? (even if whole navigation is not working - i.e. start acc - stop acc and wait until braking?)	<input type="checkbox"/>	<input type="checkbox"/>
No braking while accelerating is possible?	<input type="checkbox"/>	<input type="checkbox"/>
Does the system can be powered without the HV batteries (see its temperature and ambient without using it)?	<input type="checkbox"/>	<input type="checkbox"/>
Demonstrator health should be easily visible by external viewer	<input type="checkbox"/>	<input type="checkbox"/>
Just for sensor & control with only LV: All actuations that are safe could be tested (brakes/contactors/relays, valves)	<input type="checkbox"/>	<input type="checkbox"/>
In case of power loss, is the state safe of pressurized system? (Only S&C, no pressure)	<input type="checkbox"/>	<input type="checkbox"/>
In case of power loss, can the system be vented? (Only S&C, no pressure)	<input type="checkbox"/>	<input type="checkbox"/>
In case of connection loss, is the state safe of pressurized system? (Only S&C, no pressure)	<input type="checkbox"/>	<input type="checkbox"/>
In case of connection loss, can the system be vented? (Only S&C, no pressure)	<input type="checkbox"/>	<input type="checkbox"/>