



ERJU SYSTEM PILLAR

Stakeholder Requirements Specification CCS System - Annex A Traceability Report



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Preamble

This traceability report shows the bottom-up breakdown traceability to:



























Preamble	2
Stakeholder Requirements - Common Business Objectives	2
Stakeholder Requirements - ETCS L2 Rulebook	59
Stakeholder Requirements - CCS System	60

Stakeholder Requirements - Common Business Objectives

Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
 SPP-6662 - Limited allocation of infrastructure resources to train movements	 SPP-6604 - Optimizing track capacity	 SPT2OD-283 - Optimizing track capacity	





























Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
			✚ SPT1RS-157 - rapid response to capacity request
			✚ SPT1RS-170 - increase capacity
			✚ SPT1RS-182 - systems: extensible capacity, scalability(1)
			✚ SPT1RS-184 - flexible use of infra capacity
			✚ SPT1RS-185 - predict capacity needs(2)
			✚ SPT1RS-226 - systems: extensible capacity, scalability(2)
✚ SPP-6678 - CCS shall verify and process Traffic Management System requests to create, activate, amend, deactivate or delete track usage restrictions considering TMS optimized plan.	📄 SPP-6644 - Track user planning via Traffic Management process	📄 SPT2OD-276 - Track user planning via Traffic Management process	
✚ SPP-6684 - CCS shall authorise movements only if they don't represent a danger for railway actors (such as driver or passengers), or the infrastructure and rolling stock assets, or non-track-bound track users or mobile objects and if these movements are part of plan or actions derived from degraded operation.	📄 SPP-6644 - Track user planning via Traffic Management process	📄 SPT2OD-276 - Track user planning via Traffic Management process	
	📄 SPP-6946 - Field Force safety applications for non-trackbound objects, vehicles and persons	📄 SPT2OD-292 - Field Force Applications, Control and Supervision shall support a safe and performant trackusage (basif functionality) for objects, vehicles and persons which are not track-bound and which shall not create dangers for the traffick on track	✚ SPT1RS-196 - increase market size by standardisation
			✚ SPT1RS-221 - standardized architecture(1)
			✚ SPT1RS-224 - operational harmonisation, unique requirements
			✚ SPT1RS-247 - standardized architecture(2)
			✚ SPT1RS-254 - standard know how
	📄 SPP-7022 - Automated field force protection	📄 SPT2OD-294 - Automated field force protection	
✚ SPP-6687 - In routine operation, CCS shall support Field Force requests without the need of Field Force to have unambiguous or verbal communication with the signaller.	📄 SPP-6644 - Track user planning via Traffic Management process	📄 SPT2OD-276 - Track user planning via Traffic Management process	
	📄 SPP-6946 - Field Force safety applications for non-trackbound objects, vehicles and persons	📄 SPT2OD-292 - Field Force Applications, Control and Supervision shall support a safe and performant trackusage (basif functionality) for objects, vehicles and persons which are not track-bound and which shall not create dangers for the traffick on track	✚ SPT1RS-196 - increase market size by standardisation
			✚ SPT1RS-221 - standardized architecture(1)


























Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
			✚ SPT1RS-224 - operational harmonisation, unique requirements
			✚ SPT1RS-247 - standardized architecture(2)
			✚ SPT1RS-254 - standard know how
	📄 SPP-7022 - Automated field force protection	🔧 SPT2OD-294 - Automated field force protection	
	📄 SPP-9034 - CCS shall offer an optimized, precise and automized basic functionality to control and report any type of track usage	🔧 SPT2OD-274 - Traffic CS shall offer an optimized and automized basic functionality to control and report any type of track usage	
	📄 SPP-9269 - Reduce railway service production impact	🔧 SPT2OD-293 - Reduce production impact	✚ SPT1RS-151 - enhanced information for plan optimisation(3)
📄 SPP-6688 - In routine operation, CCS shall support the execution of requests without the need use ambiguous or verbal communication between other actors.	📄 SPP-6644 - Track user planning via Traffic Management process 📄 SPP-6946 - Field Force safety applications for non-trackbound objects, vehicles and persons	🔧 SPT2OD-276 - Track user planning via Traffic Management process 🔧 SPT2OD-292 - Field Force Applications, Control and Supervision shall support a safe and performant trackusage (basif functionality) for objects, vehicles and persons which are not track-bound and which shall not create dangers for the traffick on track	✚ SPT1RS-152 - enhanced information for plan optimisation(2)
			✚ SPT1RS-208 - automated field force communication
			✚ SPT1RS-229 - seamless and selective exchange of components under production
			✚ SPT1RS-196 - increase market size by standardisation
			✚ SPT1RS-221 - standardized architecture(1)
			✚ SPT1RS-224 - operational harmonisation, unique requirements
			✚ SPT1RS-247 - standardized architecture(2)
			✚ SPT1RS-254 - standard know how
	📄 SPP-7022 - Automated field force protection	🔧 SPT2OD-294 - Automated field force protection	






Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
	 SPP-9034 - CCS shall offer an optimized, precise and automatized basic functionality to control and report any type of track usage	 SPT2OD-274 - Traffic CS shall offer an optimized and automatized basic functionality to control and report any type of track usage	
	 SPP-9269 - Reduce railway service production impact	 SPT2OD-293 - Reduce production impact	 SPT1RS-151 - enhanced information for plan optimisation(3)
			 SPT1RS-152 - enhanced information for plan optimisation(2)
			 SPT1RS-208 - automated field force communication
 SPP-6819 - CCS shall allow the definition of specific application configuration(s) for supporting the supervision of operational production of all types of infrastructure needs and users	 SPP-6604 - Optimizing track capacity	 SPT2OD-283 - Optimizing track capacity	 SPT1RS-157 - rapid response to capacity request
			 SPT1RS-170 - increase capacity
			 SPT1RS-182 - systems: extensible capacity, scalability(1)
			 SPT1RS-184 - flexible use of infra capacity
			 SPT1RS-185 - predict capacity needs(2)
			 SPT1RS-226 - systems: extensible capacity, scalability(2)
	 SPP-9039 - Continuous supervision of railway production	 SPT2OD-280 - Continuous supervision of railway production	 SPT1RS-229 - seamless and selective exchange of components under production
	 SPP-6604 - Optimizing track capacity	 SPT2OD-283 - Optimizing track capacity	 SPT1RS-157 - rapid response to capacity request
 SPP-6820 - CCS shall support the onboard determination of track occupation - i.e. train position, length and integrity, including safety margins.			 SPT1RS-170 - increase capacity
			 SPT1RS-182 - systems: extensible capacity, scalability(1)
			 SPT1RS-184 - flexible use of infra capacity



























Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
			✚ SPT1RS-185 - predict capacity needs(2)
			✚ SPT1RS-226 - systems: extensible capacity, scalability(2)
SPP-6821 - Dynamic track path determination	SPP-6604 - Optimizing track capacity	SPT2OD-283 - Optimizing track capacity	✚ SPT1RS-157 - rapid response to capacity request
			✚ SPT1RS-170 - increase capacity
			✚ SPT1RS-182 - systems: extensible capacity, scalability(1)
			✚ SPT1RS-184 - flexible use of infra capacity
			✚ SPT1RS-185 - predict capacity needs(2)
			✚ SPT1RS-226 - systems: extensible capacity, scalability(2)
SPP-6857 - CCS shall minimize the number of configuration parameters for Generic and Specific Applications	SPP-6664 - Operational process harmonization	SPT2OD-309 - Operational process harmonization	✚ SPT1RS-166 - rapid deviation information/solution
	SPP-6990 - Improved ETCS performance	SPT2OD-282 - Improved ETCS performance	
	SPP-9542 - TCO optimization	SPT2OD-306 - TCO Optimization	✚ SPT1RS-192 - reusable right first time work
			✚ SPT1RS-197 - overall CAPEX/OPEX optimisation(1)
			✚ SPT1RS-224 - operational harmonisation, unique requirements
			✚ SPT1RS-229 - seamless and selective exchange of components under production
			✚ SPT1RS-230 - safety logic with generic safety approval
			✚ SPT1RS-232 - simplified standard safety components


























Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
			✚ SPT1RS-246 - overall CAPEX/OPEX optimisation(3)
	📄 SPP-9646 - Simplified asset configuration management	📄 SPT2OD-343 - Simplified asset configuration management	
🔗 SPP-6860 - CCS shall be based on standardized products and configurations	📄 SPP-6664 - Operational process harmonization	📄 SPT2OD-309 - Operational process harmonization	✚ SPT1RS-166 - rapid deviation information/solution
	📄 SPP-6990 - Improved ETCS performance	📄 SPT2OD-282 - Improved ETCS performance	
	📄 SPP-7645 - Long-term evolution: modularisation	📄 SPT2OD-234 - long-term evolution: modularisation	
	📄 SPP-7690 - Competitiveness through Merged Concept harmonized standardized processes, specifications and architectures	📄 SPT2OD-235 - Competitiveness	
	📄 SPP-9556 - Unit prices	📄 SPT2OD-307 - Unit prices	✚ SPT1RS-188 - Changeability and upgradeability(3), simplified integration
			✚ SPT1RS-197 - overall CAPEX/OPEX optimisation(1)
			✚ SPT1RS-246 - overall CAPEX/OPEX optimisation(3)
🔗 SPP-6882 - CCS shall support advisory systems	📄 SPP-9928 - Reduced amount of skill needs	📄 SPT2OD-320 - Reduced amount of skill needs	✚ SPT1RS-245 - automate operators knowledge management
	📄 SPP-6874 - Scalability of skills	📄 SPT2OD-321 - Scalability of skills	✚ SPT1RS-216 - Viable skill requirements
	📄 SPP-9661 - Dynamic change of system configurations	📄 SPT2OD-354 - Dynamic change of system configurations	✚ SPT1RS-192 - reusable right first time work
			✚ SPT1RS-224 - operational harmonisation, unique requirements
			✚ SPT1RS-229 - seamless and selective exchange of components under production
			✚ SPT1RS-230 - safety logic with generic safety approval
			✚ SPT1RS-232 - simplified standard safety components



























Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
 SPP-6931 - CCS shall allow a visual representation of the complete, consistent and accurate status of the operational situation	 SPP-6890 - Optimizing track capacity	 SPT2OD-329 - Optimizing track capacity	 SPT1RS-157 - rapid response to capacity request
			 SPT1RS-170 - increase capacity
			 SPT1RS-173 - predict capacity needs(1)
			 SPT1RS-176 - deep/optimized plan
			 SPT1RS-184 - flexible use of infra capacity
			 SPT1RS-185 - predict capacity needs(2)
	 SPP-10108 - Reduction of trackside CCS assets	 SPT2OD-326 - Reduction of trackside CCS assets	 SPT1RS-195 - less trackside assets
			 SPT1RS-197 - overall CAPEX/OPEX optimisation(1)
			 SPT1RS-200 - availability: less assets
			 SPT1RS-246 - overall CAPEX/OPEX optimisation(3)
 SPP-6934 - CCS shall be able to handle the specific capabilities and characteristics of the train units when executing train movements	 SPP-6890 - Optimizing track capacity	 SPT2OD-329 - Optimizing track capacity	 SPT1RS-157 - rapid response to capacity request
			 SPT1RS-170 - increase capacity
			 SPT1RS-173 - predict capacity needs(1)
			 SPT1RS-176 - deep/optimized plan
			 SPT1RS-184 - flexible use of infra capacity
			 SPT1RS-185 - predict capacity needs(2)
	 SPP-9495 - Positive business case	 SPT2OD-305 - Positive business case	
	 SPP-6890 - Optimizing track capacity	 SPT2OD-329 - Optimizing track capacity	


























Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
 SPP-6936 - CCS shall allow a visual representation malfunctioning devices and their impact on the operational situation			 SPT1RS-157 - rapid response to capacity request
			 SPT1RS-170 - increase capacity
			 SPT1RS-173 - predict capacity needs(1)
			 SPT1RS-176 - deep/optimized plan
			 SPT1RS-184 - flexible use of infra capacity
			 SPT1RS-185 - predict capacity needs(2)
	 SPP-10108 - Reduction of trackside CCS assets	 SPT2OD-326 - Reduction of trackside CCS assets	 SPT1RS-195 - less trackside assets
			 SPT1RS-197 - overall CAPEX/ OPEX optimisation(1)
			 SPT1RS-200 - availability: less assets
			 SPT1RS-246 - overall CAPEX/ OPEX optimisation(3)
 SPP-6938 - CCS shall implement functionalities that allow the use and combination of different types of sensor technologies and information	 SPP-6890 - Optimizing track capacity	 SPT2OD-329 - Optimizing track capacity	 SPT1RS-157 - rapid response to capacity request
			 SPT1RS-170 - increase capacity
			 SPT1RS-173 - predict capacity needs(1)
			 SPT1RS-176 - deep/optimized plan
			 SPT1RS-184 - flexible use of infra capacity
			 SPT1RS-185 - predict capacity needs(2)
	 SPP-9615 - Upgradeability	 SPT2OD-311 - Upgradeability	 SPT1RS-182 - systems: extensible capacity, scalability(1)

Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
			✚ SPT1RS-188 - Changeability and upgradeability(3), simplified integration
			✚ SPT1RS-194 - independent lifecycle, simple exchange
			✚ SPT1RS-198 - automate lifecycle processes, independent lifecycle
			✚ SPT1RS-212 - non invasive/noticeable cyber security
			✚ SPT1RS-213 - local environment cyber security
			✚ SPT1RS-235 - viable forward/backward compatibility
			✚ SPT1RS-247 - standardized architecture(2)
	 SPP-10108 - Reduction of trackside CCS assets	 SPT2OD-326 - Reduction of trackside CCS assets	✚ SPT1RS-195 - less trackside assets
			✚ SPT1RS-197 - overall CAPEX/OPEX optimisation(1)
			✚ SPT1RS-200 - availability: less assets
			✚ SPT1RS-246 - overall CAPEX/OPEX optimisation(3)
 SPP-6940 - CCS shall deploy and use future sensor technology, based on defined Standard Interfaces) with no impact on the Traffic CS safety logic	 SPP-6890 - Optimizing track capacity	 SPT2OD-329 - Optimizing track capacity	✚ SPT1RS-157 - rapid response to capacity request
			✚ SPT1RS-170 - increase capacity
			✚ SPT1RS-173 - predict capacity needs(1)
			✚ SPT1RS-176 - deep/optimized plan
			✚ SPT1RS-184 - flexible use of infra capacity

Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
			<div>  SPT1RS-185 - predict capacity needs(2) </div>
<div>  SPP-6941 - CCS shall perform periodical self-tests and self-diagnostics of its vital functions </div>	<div>  SPP-6890 - Optimizing track capacity </div>	<div>  SPT2OD-329 - Optimizing track capacity </div>	<div>  SPT1RS-157 - rapid response to capacity request </div>
			<div>  SPT1RS-170 - increase capacity </div>
			<div>  SPT1RS-173 - predict capacity needs(1) </div>
			<div>  SPT1RS-176 - deep/optimized plan </div>
			<div>  SPT1RS-184 - flexible use of infra capacity </div>
			<div>  SPT1RS-185 - predict capacity needs(2) </div>
	<div>  SPP-9684 - Sharing of diagnostic information </div>	<div>  SPT2OD-346 - Sharing of diagnostic information </div>	
<div>  SPP-6947 - CCS shall allow movements from any point A to any point B without restrictions, if a route is available and is physically feasible. </div>	<div>  SPP-6930 - Optimizing track capacity (SPT2OD-329) </div>	<div>  SPT2OD-329 - Optimizing track capacity </div>	<div>  SPT1RS-157 - rapid response to capacity request </div>
			<div>  SPT1RS-170 - increase capacity </div>
			<div>  SPT1RS-173 - predict capacity needs(1) </div>
			<div>  SPT1RS-176 - deep/optimized plan </div>
			<div>  SPT1RS-184 - flexible use of infra capacity </div>
			<div>  SPT1RS-185 - predict capacity needs(2) </div>
	<div>  SPP-7220 - Safety assessment on runtime </div>	<div>  SPT2OD-277 - Safety assessment on run time </div>	<div>  SPT1RS-192 - reusable right first time work </div>
			<div>  SPT1RS-229 - seamless and selective exchange of components under production </div>
			<div>  SPT1RS-230 - safety logic with generic safety approval </div>

Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
			 SPT1RS-232 - simplified standard safety components
 SPP-6948 - Traffic CS shall support driving in relative braking distance, managed by trackside infrastructure.	 SPP-6930 - Optimizing track capacity (SPT2OD-329)	 SPT2OD-329 - Optimizing track capacity	 SPT1RS-157 - rapid response to capacity request
			 SPT1RS-170 - increase capacity
			 SPT1RS-173 - predict capacity needs(1)
			 SPT1RS-176 - deep/optimized plan
			 SPT1RS-184 - flexible use of infra capacity
			 SPT1RS-185 - predict capacity needs(2)
 SPP-6949 - CCS shall merge localisation information from train-side (e.g. position and speed) and trackside sources (e.g. track occupancy) into one safe representation as part of the operating state.	 SPP-6604 - Optimizing track capacity	 SPT2OD-283 - Optimizing track capacity	 SPT1RS-157 - rapid response to capacity request
			 SPT1RS-170 - increase capacity
			 SPT1RS-182 - systems: extensible capacity, scalability(1)
			 SPT1RS-184 - flexible use of infra capacity
			 SPT1RS-185 - predict capacity needs(2)
	 SPP-6930 - Optimizing track capacity (SPT2OD-329)	 SPT2OD-329 - Optimizing track capacity	 SPT1RS-226 - systems: extensible capacity, scalability(2)
			 SPT1RS-157 - rapid response to capacity request
			 SPT1RS-170 - increase capacity
			 SPT1RS-173 - predict capacity needs(1)
			 SPT1RS-176 - deep/optimized plan



































Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
			 SPT1RS-184 - flexible use of infra capacity
			 SPT1RS-185 - predict capacity needs(2)
	 SPP-7268 - Stable and backward compatible air-gap interface	 SPT2OD-284 - Stable and backwards compatible air gap interface	
	 SPP-9039 - Continuous supervision of railway production	 SPT2OD-280 - Continuous supervision of railway production	 SPT1RS-229 - seamless and selective exchange of components under production
 SPP-6950 - CCS shall support virtual coupling of trains, with train-to-train communication.	 SPP-6930 - Optimizing track capacity (SPT2OD-329)	 SPT2OD-329 - Optimizing track capacity	 SPT1RS-157 - rapid response to capacity request
			 SPT1RS-170 - increase capacity
			 SPT1RS-173 - predict capacity needs(1)
			 SPT1RS-176 - deep/optimized plan
			 SPT1RS-184 - flexible use of infra capacity
			 SPT1RS-185 - predict capacity needs(2)
 SPP-6957 - CCS shall support the integration of complementary sensor information and data sources that enable the supervision of vehicles as well as trackside personnel and rail customers.	 SPP-6930 - Optimizing track capacity (SPT2OD-329)	 SPT2OD-329 - Optimizing track capacity	 SPT1RS-157 - rapid response to capacity request
			 SPT1RS-170 - increase capacity
			 SPT1RS-173 - predict capacity needs(1)
			 SPT1RS-176 - deep/optimized plan
			 SPT1RS-184 - flexible use of infra capacity
			 SPT1RS-185 - predict capacity needs(2)
		 SPT2OD-292 - Field Force Applications, Control and Supervision shall support a safe and performant trackusage (basif functionality) for objects,	



































Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
	 SPP-6946 - Field Force safety applications for non-trackbound objects, vehicles and persons	vehicles and persons which are not track-bound and which shall not create dangers for the traffick on track	 SPT1RS-196 - increase market size by standardisation  SPT1RS-221 - standardized architecture(1)  SPT1RS-224 - operational harmonisation, unique requirements  SPT1RS-247 - standardized architecture(2)  SPT1RS-254 - standard know how
	 SPP-7022 - Automated field force protection	 SPT2OD-294 - Automated field force protection	
	 SPP-9039 - Continuous supervision of railway production	 SPT2OD-280 - Continuous supervision of railway production	 SPT1RS-229 - seamless and selective exchange of components under production
	 SPP-9269 - Reduce railway service production impact	 SPT2OD-293 - Reduce production impact	 SPT1RS-151 - enhanced information for plan optimisation(3)  SPT1RS-152 - enhanced information for plan optimisation(2)  SPT1RS-208 - automated field force communication  SPT1RS-229 - seamless and selective exchange of components under production
	 SPP-6960 - Field Force applications and CCS shall support a safe and performant track usage for trackbound (e.g. vehicles) and non-trackbound vehicle, and persons without creating a dangers for the traffic on the track.	 SPT2OD-276 - Track user planning via Traffic Management process	
	 SPP-6946 - Field Force safety applications for non-trackbound objects, vehicles and persons	 SPT2OD-292 - Field Force Applications, Control and Supervision shall support a safe and performant trackusage (basif functionality) for objects, vehicles and persons which are not track-bound and which shall not create dangers for the traffick on track	 SPT1RS-196 - increase market size by standardisation  SPT1RS-221 - standardized architecture(1)  SPT1RS-224 - operational harmonisation, unique requirements  SPT1RS-247 - standardized architecture(2)





































Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
			✚ SPT1RS-254 - standard know how
	📄 SPP-7022 - Automated field force protection	📄 SPT2OD-294 - Automated field force protection	
	📄 SPP-7024 - Efficient and cheaper warning systems	📄 SPT2OD-295 - Efficient and cheaper warning systems	✚ SPT1RS-248 - comprehensive incident management
	📄 SPP-9039 - Continuous supervision of railway production	📄 SPT2OD-280 - Continuous supervision of railway production	✚ SPT1RS-229 - seamless and selective exchange of components under production
	📄 SPP-9269 - Reduce railway service production impact	📄 SPT2OD-293 - Reduce production impact	✚ SPT1RS-151 - enhanced information for plan optimisation(3)
			✚ SPT1RS-152 - enhanced information for plan optimisation(2)
			✚ SPT1RS-208 - automated field force communication
			✚ SPT1RS-229 - seamless and selective exchange of components under production
🔗 SPP-6991 - CCS shall support trains equipped with ETCS Baseline 3 (ETCS Level 2 only). This means CCS will implement ETCS System Version 2 on the trackside. The implemented ETCS System Versions can be raised over time	📄 SPP-6590 - Standard Components	📄 SPT2OD-233 - standard components	
	📄 SPP-6670 - ATO for normal and degraded modes	📄 SPT2OD-275 - ATO for normal and degraded modes	✚ SPT1RS-179 - ATO(1)
			✚ SPT1RS-186 - ATO(2), automated shunting
	📄 SPP-6990 - Improved ETCS performance	📄 SPT2OD-282 - Improved ETCS performance	
🔗 SPP-7020 - CCS shall provide to Traffic Management System a complete, consistent and accurate status of the operational state.	📄 SPP-7268 - Stable and backward compatible air-gap interface	📄 SPT2OD-284 - Stable and backwards compatible air gap interface	
	📄 SPP-6604 - Optimizing track capacity	📄 SPT2OD-283 - Optimizing track capacity	✚ SPT1RS-157 - rapid response to capacity request
			✚ SPT1RS-170 - increase capacity
			✚ SPT1RS-182 - systems: extensible capacity, scalability(1)
			✚ SPT1RS-184 - flexible use of infra capacity
			✚ SPT1RS-185 - predict capacity needs(2)































Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
			✚ SPT1RS-226 - systems: extensible capacity, scalability(2)
	📄 SPP-6644 - Track user planning via Traffic Management process	📄 SPT2OD-276 - Track user planning via Traffic Management process	
	📄 SPP-6670 - ATO for normal and degraded modes	📄 SPT2OD-275 - ATO for normal and degraded modes	✚ SPT1RS-179 - ATO(1)
			✚ SPT1RS-186 - ATO(2), automated shunting
	📄 SPP-6930 - Optimizing track capacity (SPT2OD-329)	📄 SPT2OD-329 - Optimizing track capacity	✚ SPT1RS-157 - rapid response to capacity request
			✚ SPT1RS-170 - increase capacity
			✚ SPT1RS-173 - predict capacity needs(1)
			✚ SPT1RS-176 - deep/optimized plan
			✚ SPT1RS-184 - flexible use of infra capacity
			✚ SPT1RS-185 - predict capacity needs(2)
	📄 SPP-6990 - Improved ETCS performance	📄 SPT2OD-282 - Improved ETCS performance	
	📄 SPP-9034 - CCS shall offer an optimized, precise and automatized basic functionality to control and report any type of track usage	📄 SPT2OD-274 - Traffic CS shall offer an optimized and automatized basic functionality to control and report any type of track usage	
	📄 SPP-9648 - Data acquisition	📄 SPT2OD-332 - Data acquisition	
	📄 SPP-9927 - Simplified, modular architecture to avoid redundancies	📄 SPT2OD-315 - Simplified, modular architecture to avoid redundancies	✚ SPT1RS-192 - reusable right first time work
			✚ SPT1RS-224 - operational harmonisation, unique requirements
			✚ SPT1RS-229 - seamless and selective exchange of components under production
			✚ SPT1RS-232 - simplified standard safety components



























Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
SPP-7021 - CCS shall allow manoeuvres with cab-signalling (with no light signals) or using not-harmonised dwarf light signals.	SPP-6990 - Improved ETCS performance	SPT2OD-282 - Improved ETCS performance	
	SPP-7268 - Stable and backward compatible air-gap interface	SPT2OD-284 - Stable and backwards compatible air gap interface	
SPP-7025 - CCS shall be designed to use ETCS L2 without optical (light) signals.	SPP-6990 - Improved ETCS performance	SPT2OD-282 - Improved ETCS performance	
	SPP-7268 - Stable and backward compatible air-gap interface	SPT2OD-284 - Stable and backwards compatible air gap interface	
	SPP-10108 - Reduction of trackside CCS assets	SPT2OD-326 - Reduction of trackside CCS assets	SPT1RS-195 - less trackside assets
			SPT1RS-197 - overall CAPEX/OPEX optimisation(1)
SPP-7053 - CCS shall support the dynamic automated determination of train characteristics	SPP-6990 - Improved ETCS performance	SPT2OD-282 - Improved ETCS performance	SPT1RS-200 - availability: less assets
			SPT1RS-246 - overall CAPEX/OPEX optimisation(3)
SPP-7054 - CCS shall autonomously supervise the routine procedures for the handing over of safety responsibility	SPP-7024 - Efficient and cheaper warning systems	SPT2OD-295 - Efficient and cheaper warning systems	SPT1RS-248 - comprehensive incident management
	SPP-9269 - Reduce railway service production impact	SPT2OD-293 - Reduce production impact	SPT1RS-151 - enhanced information for plan optimisation(3)
			SPT1RS-152 - enhanced information for plan optimisation(2)
			SPT1RS-208 - automated field force communication
SPP-7068 - CCS shall in real time optimize the operational plans	SPP-6670 - ATO for normal and degraded modes	SPT2OD-275 - ATO for normal and degraded modes	SPT1RS-229 - seamless and selective exchange of components under production
			SPT1RS-179 - ATO(1)
SPP-7081 - CCS shall automatically supervise rail operation	SPP-6670 - ATO for normal and degraded modes	SPT2OD-275 - ATO for normal and degraded modes	SPT1RS-186 - ATO(2), automated shunting
			SPT1RS-179 - ATO(1)


























Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
	 SPP-6990 - Improved ETCS performance	 SPT2OD-282 - Improved ETCS performance	
 SPP-7082 - CCS shall minimize the impact of track work on railway operations and increase the safety for the field force	 SPP-6670 - ATO for normal and degraded modes	 SPT2OD-275 - ATO for normal and degraded modes	 SPT1RS-179 - ATO(1)
			 SPT1RS-186 - ATO(2), automated shunting
	 SPP-6946 - Field Force safety applications for non-trackbound objects, vehicles and persons	 SPT2OD-292 - Field Force Applications, Control and Supervision shall support a safe and performant trackusage (basif functionality) for objects, vehicles and persons which are not track-bound and which shall not create dangers for the traffick on track	 SPT1RS-196 - increase market size by standardisation
			 SPT1RS-221 - standardized architecture(1)
			 SPT1RS-224 - operational harmonisation, unique requirements
			 SPT1RS-247 - standardized architecture(2)
			 SPT1RS-254 - standard know how
	 SPP-7022 - Automated field force protection	 SPT2OD-294 - Automated field force protection	
	 SPP-7268 - Stable and backward compatible air-gap interface	 SPT2OD-284 - Stable and backwards compatible air gap interface	
	 SPP-9034 - CCS shall offer an optimized, precise and automized basic functionality to control and report any type of track usage	 SPT2OD-274 - Traffic CS shall offer an optimized and automized basic functionality to control and report any type of track usage	
 SPP-7084 - CCS shall handle different system capabilities supporting standard manual controls	 SPP-9269 - Reduce railway service production impact	 SPT2OD-293 - Reduce production impact	 SPT1RS-151 - enhanced information for plan optimisation(3)
			 SPT1RS-152 - enhanced information for plan optimisation(2)
			 SPT1RS-208 - automated field force communication
			 SPT1RS-229 - seamless and selective exchange of components under production
	 SPP-9472 - Achieving a reduced TCO	 SPT2OD-304 - Reduced TCO	
 SPP-7084 - CCS shall handle different system capabilities supporting standard manual controls	 SPP-6670 - ATO for normal and degraded modes	 SPT2OD-275 - ATO for normal and degraded modes	 SPT1RS-179 - ATO(1)
			 SPT1RS-186 - ATO(2), automated shunting

Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
	 SPP-7268 - Stable and backward compatible air-gap interface	 SPT2OD-284 - Stable and backwards compatible air gap interface	
	 SPP-9472 - Achieving a reduced TCO	 SPT2OD-304 - Reduced TCO	
 SPP-7098 - CCS shall achieve increased standards of reliability, precision and safety	 SPP-6670 - ATO for normal and degraded modes	 SPT2OD-275 - ATO for normal and degraded modes	 SPT1RS-179 - ATO(1)
			 SPT1RS-186 - ATO(2), automated shunting
 SPP-7111 - CCS shall optimize TCO through automation	 SPP-6670 - ATO for normal and degraded modes	 SPT2OD-275 - ATO for normal and degraded modes	 SPT1RS-179 - ATO(1)
			 SPT1RS-186 - ATO(2), automated shunting
	 SPP-9542 - TCO optimization	 SPT2OD-306 - TCO Optimization	 SPT1RS-192 - reusable right first time work
			 SPT1RS-197 - overall CAPEX/ OPEX optimisation(1)
			 SPT1RS-224 - operational harmonisation, unique requirements
			 SPT1RS-229 - seamless and selective exchange of components under production
			 SPT1RS-230 - safety logic with generic safety approval
			 SPT1RS-232 - simplified standard safety components
			 SPT1RS-246 - overall CAPEX/ OPEX optimisation(3)
 SPP-7122 - Scalable, modular, multi-layered and standardised CCS architecture	 SPP-6590 - Standard Components	 SPT2OD-233 - standard components	
	 SPP-6670 - ATO for normal and degraded modes	 SPT2OD-275 - ATO for normal and degraded modes	 SPT1RS-179 - ATO(1)
			 SPT1RS-186 - ATO(2), automated shunting
	 SPP-7268 - Stable and backward compatible air-gap interface	 SPT2OD-284 - Stable and backwards compatible air gap interface	
	 SPP-7645 - Long-term evolution: modularisation	 SPT2OD-234 - long-term evolution: modularisation	

Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
	 SPP-7690 - Competitiveness through Merged Concept harmonized standardized processes, specifications and architectures	 SPT2OD-235 - Competitiveness	
	 SPP-9621 - Decoupling of asset life cycle	 SPT2OD-317 - Decoupling of asset life cycle	 SPT1RS-188 - Changeability and upgradeability(3), simplified integration
	 SPP-9927 - Simplified, modular architecture to avoid redundancies	 SPT2OD-315 - Simplified, modular architecture to avoid redundancies	 SPT1RS-192 - reusable right first time work
			 SPT1RS-224 - operational harmonisation, unique requirements
			 SPT1RS-229 - seamless and selective exchange of components under production
	 SPP-10178 - Improved change process and backwards compatibility		 SPT1RS-232 - simplified standard safety components
 SPP-7130 - CCS shall support technical and operational interoperability	 SPP-6670 - ATO for normal and degraded modes	 SPT2OD-275 - ATO for normal and degraded modes	 SPT1RS-179 - ATO(1)
	 SPP-9928 - Reduced amount of skill needs	 SPT2OD-320 - Reduced amount of skill needs	 SPT1RS-186 - ATO(2), automated shunting
 SPP-7199 - CCS shall be flexible enabling an efficient and affordable migration	 SPP-6670 - ATO for normal and degraded modes	 SPT2OD-275 - ATO for normal and degraded modes	 SPT1RS-245 - automate operators knowledge management
	 SPP-9495 - Positive business case	 SPT2OD-305 - Positive business case	 SPT1RS-179 - ATO(1)
 SPP-7548 - CCS shall provide a scalable and adaptable system architecture that is suitable for different contexts depending on the IM use cases.			 SPT1RS-186 - ATO(2), automated shunting
 SPP-7663 - Implementation of TSI	 SPP-7268 - Stable and backward compatible air-gap interface	 SPT2OD-284 - Stable and backwards compatible air gap interface	
 SPP-7668 - ATO GoA 3/4	 SPP-7268 - Stable and backward compatible air-gap interface	 SPT2OD-284 - Stable and backwards compatible air gap interface	
 SPP-8626 - CCS shall support diagnose test of a component during running time.		 SPT2OD-279 - Automation in degraded modes and system intervention	





























Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
	 SPP-6813 - Automation in degraded modes and system intervention		 SPT1RS-230 - safety logic with generic safety approval
	 SPP-9661 - Dynamic change of system configurations	 SPT2OD-354 - Dynamic change of system configurations	 SPT1RS-192 - reusable right first time work
			 SPT1RS-224 - operational harmonisation, unique requirements
			 SPT1RS-229 - seamless and selective exchange of components under production
			 SPT1RS-230 - safety logic with generic safety approval
			 SPT1RS-232 - simplified standard safety components
 SPP-8810 - CCS shall base the information exchange to/from subsystem component on standard communication interfaces that shall be defined up to the physical layer.	 SPP-8622 - CCS allows to control a broad heterogeneity of trackside assets technologies in a standardized way	 SPT2OD-297 - Trackside Asset CS allows to control a broad heterogeneity of systems and technologies in a standardized way	 SPT1RS-195 - less trackside assets
			 SPT1RS-196 - increase market size by standardisation
			 SPT1RS-221 - standardized architecture(1)
			 SPT1RS-224 - operational harmonisation, unique requirements
			 SPT1RS-247 - standardized architecture(2)
			 SPT1RS-254 - standard know how
 SPP-8839 - If driver is involved in the driving process, CCS shall support driving assistance recommendations	 SPP-6670 - ATO for normal and degraded modes	 SPT2OD-275 - ATO for normal and degraded modes	 SPT1RS-179 - ATO(1)
			 SPT1RS-186 - ATO(2), automated shunting
	 SPP-7268 - Stable and backward compatible air-gap interface	 SPT2OD-284 - Stable and backwards compatible air gap interface	
	 SPP-8841 - SPT2TRAFFIC-6084 - Driver advisory systems	 SPT2OD-289 - Driver advisory systems	 SPT1RS-166 - rapid deviation information/solution
 SPP-8863 - CCS designed to reduce OPEX		 SPT2OD-284 - Stable and backwards compatible air gap interface	





















Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
	 SPP-7268 - Stable and backward compatible air-gap interface		
	 SPP-10178 - Improved change process and backwards compatibility		
 SPP-8864 - CCS able to handle different and changing system capabilities of its actors during operation	 SPP-6813 - Automation in degraded modes and system intervention	 SPT2OD-279 - Automation in degraded modes and system intervention	 SPT1RS-230 - safety logic with generic safety approval
	 SPP-7268 - Stable and backward compatible air-gap interface	 SPT2OD-284 - Stable and backwards compatible air gap interface	
	 SPP-9556 - Unit prices	 SPT2OD-307 - Unit prices	 SPT1RS-188 - Changeability and upgradeability(3), simplified integration
			 SPT1RS-197 - overall CAPEX/OPEX optimisation(1)
			 SPT1RS-246 - overall CAPEX/OPEX optimisation(3)
	 SPP-9615 - Upgradeability	 SPT2OD-311 - Upgradeability	 SPT1RS-182 - systems: extensible capacity, scalability(1)
			 SPT1RS-188 - Changeability and upgradeability(3), simplified integration
			 SPT1RS-194 - independent lifecycle, simple exchange
			 SPT1RS-198 - automate lifecycle processes, independent lifecycle
			 SPT1RS-212 - non invasive/noticeable cyber security
			 SPT1RS-213 - local environment cyber security
			 SPT1RS-235 - viable forward/backward compatibility
			 SPT1RS-247 - standardized architecture(2)
 SPP-8865 - CCS shall reduce engineering complexity	 SPP-7268 - Stable and backward compatible air-gap interface	 SPT2OD-284 - Stable and backwards compatible air gap interface	


























Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
 SPP-8866 - Implement standardised interfaces without hindering of innovation	 SPP-6670 - ATO for normal and degraded modes	 SPT2OD-275 - ATO for normal and degraded modes	 SPT1RS-179 - ATO(1)
			 SPT1RS-186 - ATO(2), automated shunting
	 SPP-7268 - Stable and backward compatible air-gap interface	 SPT2OD-284 - Stable and backwards compatible air gap interface	
	 SPP-9615 - Upgradeability	 SPT2OD-311 - Upgradeability	 SPT1RS-182 - systems: extensible capacity, scalability(1)
			 SPT1RS-188 - Changeability and upgradeability(3), simplified integration
			 SPT1RS-194 - independent lifecycle, simple exchange
			 SPT1RS-198 - automate lifecycle processes, independent lifecycle
			 SPT1RS-212 - non invasive/noticeable cyber security
			 SPT1RS-213 - local environment cyber security
			 SPT1RS-235 - viable forward/backward compatibility
			 SPT1RS-247 - standardized architecture(2)
	 SPP-9868 - Modular Safety	 SPT2OD-352 - Modular Safety	 SPT1RS-188 - Changeability and upgradeability(3), simplified integration
			 SPT1RS-189 - Changeability and upgradeability(2)
			 SPT1RS-190 - Changeability and upgradeability(1)
			 SPT1RS-191 - changeability
			 SPT1RS-192 - reusable right first time work
			 SPT1RS-218 - modularity



























Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
<div></div>	<div></div>	<div></div>	<div>✦ SPT1RS-220 - overall CAPEX/ OPEX optimisation(2)</div>
			<div>✦ SPT1RS-221 - standardized architecture(1)</div>
			<div>✦ SPT1RS-224 - operational harmonisation, unique requirements</div>
			<div>✦ SPT1RS-227 - Flexible incorporation of innovations</div>
			<div>✦ SPT1RS-230 - safety logic with generic safety approval</div>
			<div>✦ SPT1RS-233 - simple repeatable DevOps</div>
			<div>✦ SPT1RS-234 - viable migration path</div>
			<div>✦ SPT1RS-235 - viable forward/ backward compatibility</div>
			<div>✦ SPT1RS-238 - simplify certificates and their impacts</div>
			<div>✦ SPT1RS-241 - efficient decision and working methodolog</div>
			<div>✦ SPT1RS-242 - fast high-quality development</div>
			<div>✦ SPT1RS-246 - overall CAPEX/ OPEX optimisation(3)</div>
			<div>✦ SPT1RS-247 - standardized architecture(2)</div>
			<div>✦ SPT1RS-252 - "full" reusability</div>
			<div>✦ SPT1RS-254 - standard know how</div>
<div>⚙ SPP-8867 - Support Backward compatibility within the Target System architecture</div>	<div>📄 SPP-7268 - Stable and backward compatible air-gap interface</div>	<div>📄 SPT2OD-284 - Stable and backwards compatible air gap interface</div>	
<div>⚙ SPP-9266 - Management of variable System Capabilities</div>	<div>📄 SPP-6670 - ATO for normal and degraded modes</div>	<div>📄 SPT2OD-275 - ATO for normal and degraded modes</div>	<div>✦ SPT1RS-179 - ATO(1)</div>































Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
			✚ SPT1RS-186 - ATO(2), automated shunting
	📄 SPP-6813 - Automation in degraded modes and system intervention	🔧 SPT2OD-279 - Automation in degraded modes and system intervention	✚ SPT1RS-230 - safety logic with generic safety approval
	📄 SPP-7220 - Safety assessment on runtime	🔧 SPT2OD-277 - Safety assessment on run time	✚ SPT1RS-192 - reusable right first time work
			✚ SPT1RS-229 - seamless and selective exchange of components under production
			✚ SPT1RS-230 - safety logic with generic safety approval
			✚ SPT1RS-232 - simplified standard safety components
	📄 SPP-7268 - Stable and backward compatible air-gap interface	🔧 SPT2OD-284 - Stable and backwards compatible air gap interface	
🔗 SPP-9270 - Support for mixed fleet operation	📄 SPP-7220 - Safety assessment on runtime	🔧 SPT2OD-277 - Safety assessment on run time	✚ SPT1RS-192 - reusable right first time work
			✚ SPT1RS-229 - seamless and selective exchange of components under production
			✚ SPT1RS-230 - safety logic with generic safety approval
			✚ SPT1RS-232 - simplified standard safety components
🔗 SPP-9274 - Upgradeability of Internal Components	📄 SPP-7220 - Safety assessment on runtime	🔧 SPT2OD-277 - Safety assessment on run time	✚ SPT1RS-192 - reusable right first time work
			✚ SPT1RS-229 - seamless and selective exchange of components under production
			✚ SPT1RS-230 - safety logic with generic safety approval
			✚ SPT1RS-232 - simplified standard safety components
	📄 SPP-7645 - Long-term evolution: modularisation	🔧 SPT2OD-234 - long-term evolution: modularisation	
























Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
	 SPP-9039 - Continuous supervision of railway production	 SPT2OD-280 - Continuous supervision of railway production	 SPT1RS-229 - seamless and selective exchange of components under production
	 SPP-9927 - Simplified, modular architecture to avoid redundancies	 SPT2OD-315 - Simplified, modular architecture to avoid redundancies	 SPT1RS-192 - reusable right first time work
			 SPT1RS-224 - operational harmonisation, unique requirements
			 SPT1RS-229 - seamless and selective exchange of components under production
			 SPT1RS-232 - simplified standard safety components
	 SPP-10178 - Improved change process and backwards compatibility		
 SPP-9296 - CCS shall enable updates of Configuration Data on runtime	 SPP-10228 - Selective on demand replacements	 SPT2OD-328 - Selective on demand replacements	 SPT1RS-197 - overall CAPEX/OPEX optimisation(1)
			 SPT1RS-246 - overall CAPEX/OPEX optimisation(3)
	 SPP-6813 - Automation in degraded modes and system intervention	 SPT2OD-279 - Automation in degraded modes and system intervention	 SPT1RS-230 - safety logic with generic safety approval
	 SPP-7220 - Safety assessment on runtime	 SPT2OD-277 - Safety assessment on run time	 SPT1RS-192 - reusable right first time work
			 SPT1RS-229 - seamless and selective exchange of components under production
			 SPT1RS-230 - safety logic with generic safety approval
			 SPT1RS-232 - simplified standard safety components
	 SPP-9661 - Dynamic change of system configurations	 SPT2OD-354 - Dynamic change of system configurations	 SPT1RS-192 - reusable right first time work
			 SPT1RS-224 - operational harmonisation, unique requirements

Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
			 SPT1RS-229 - seamless and selective exchange of components under production
			 SPT1RS-230 - safety logic with generic safety approval
			 SPT1RS-232 - simplified standard safety components
	 SPP-9687 - Independent asset life cycle	 SPT2OD-331 - Independent asset life cycle	 SPT1RS-188 - Changeability and upgradeability(3), simplified integration
			 SPT1RS-192 - reusable right first time work
			 SPT1RS-193 - automate lifecycle processes
			 SPT1RS-224 - operational harmonisation, unique requirements
			 SPT1RS-229 - seamless and selective exchange of components under production
			 SPT1RS-230 - safety logic with generic safety approval
			 SPT1RS-232 - simplified standard safety components
	 SPP-9903 - Security by Design	 SPT2OD-349 - Security by Design	 SPT1RS-212 - non invasive/noticeable cyber security
			 SPT1RS-213 - local environment cyber security
	 SPP-9927 - Simplified, modular architecture to avoid redundancies	 SPT2OD-315 - Simplified, modular architecture to avoid redundancies	 SPT1RS-192 - reusable right first time work
			 SPT1RS-224 - operational harmonisation, unique requirements
























Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
 SPP-9297 - Reduction of engineering complexity	 SPP-7220 - Safety assessment on runtime	 SPT2OD-277 - Safety assessment on run time	 SPT1RS-229 - seamless and selective exchange of components under production
			 SPT1RS-232 - simplified standard safety components
			 SPT1RS-192 - reusable right first time work
			 SPT1RS-229 - seamless and selective exchange of components under production
	 SPP-9686 - Simplified process for planning and installing CCS systems	 SPT2OD-327 - Simplified process for planning and installing CCS systems	 SPT1RS-230 - safety logic with generic safety approval
			 SPT1RS-232 - simplified standard safety components
			 SPT1RS-192 - reusable right first time work
			 SPT1RS-224 - operational harmonisation, unique requirements
	 SPP-9928 - Reduced amount of skill needs	 SPT2OD-320 - Reduced amount of skill needs	 SPT1RS-229 - seamless and selective exchange of components under production
			 SPT1RS-230 - safety logic with generic safety approval
			 SPT1RS-232 - simplified standard safety components
			 SPT1RS-245 - automate operators knowledge management
 SPP-9298 - Minimum required Configuration Data implementation	 SPP-7220 - Safety assessment on runtime	 SPT2OD-277 - Safety assessment on run time	 SPT1RS-192 - reusable right first time work
			 SPT1RS-229 - seamless and selective exchange of components under production
			 SPT1RS-230 - safety logic with generic safety approval

Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
	 SPP-9686 - Simplified process for planning and installing CCS systems	 SPT2OD-327 - Simplified process for planning and installing CCS systems	 SPT1RS-232 - simplified standard safety components
			 SPT1RS-192 - reusable right first time work
			 SPT1RS-224 - operational harmonisation, unique requirements
			 SPT1RS-229 - seamless and selective exchange of components under production
			 SPT1RS-230 - safety logic with generic safety approval
			 SPT1RS-232 - simplified standard safety components
	 SPP-9928 - Reduced amount of skill needs	 SPT2OD-320 - Reduced amount of skill needs	 SPT1RS-245 - automate operators knowledge management
 SPP-9300 - Support for changing Operational Plans	 SPP-9034 - CCS shall offer an optimized, precise and automized basic functionality to control and report any type of track usage	 SPT2OD-274 - Traffic CS shall offer an optimized and automized basic functionality to control and report any type of track usage	
 SPP-9303 - Execution of Safety Supervision based on predefined procedures	 SPP-6604 - Optimizing track capacity	 SPT2OD-283 - Optimizing track capacity	 SPT1RS-157 - rapid response to capacity request
			 SPT1RS-170 - increase capacity
			 SPT1RS-182 - systems: extensible capacity, scalability(1)
			 SPT1RS-184 - flexible use of infra capacity
			 SPT1RS-185 - predict capacity needs(2)
			 SPT1RS-226 - systems: extensible capacity, scalability(2)
	 SPP-7220 - Safety assessment on runtime	 SPT2OD-277 - Safety assessment on run time	 SPT1RS-192 - reusable right first time work

Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
			<div>  SPT1RS-229 - seamless and selective exchange of components under production </div>
			<div>  SPT1RS-230 - safety logic with generic safety approval </div>
			<div>  SPT1RS-232 - simplified standard safety components </div>
<div>  SPP-9469 - CCS shall support scalable PRAMSS targets </div>	<div>  SPP-9460 - Scalable PRAMSS targets agreed with stakeholders </div>		
	<div>  SPP-9495 - Positive business case </div>	<div>  SPT2OD-305 - Positive business case </div>	
<div>  SPP-9496 - CCS shall be adaptable to local performance requirements by ensuring the scalability of its software components </div>	<div>  SPP-9495 - Positive business case </div>	<div>  SPT2OD-305 - Positive business case </div>	
	<div>  SPP-9943 - Reduce special hardware </div>	<div>  SPT2OD-333 - Reduced special hardware </div>	<div>  SPT1RS-196 - increase market size by standardisation </div>
<div>  SPP-9513 - CCS shall be based on Generic Products that can be configured using openly available configuration parameters to address varying application needs </div>	<div>  SPP-9495 - Positive business case </div>	<div>  SPT2OD-305 - Positive business case </div>	
	<div>  SPP-9646 - Simplified asset configuration management </div>	<div>  SPT2OD-343 - Simplified asset configuration management </div>	
<div>  SPP-9553 - CCS Hardware, Software and Engineering Data shall be independently upgradeable to minimize engineering efforts and reduce deployment time. </div>	<div>  SPP-9542 - TCO optimization </div>	<div>  SPT2OD-306 - TCO Optimization </div>	<div>  SPT1RS-192 - reusable right first time work </div>
			<div>  SPT1RS-197 - overall CAPEX/ OPEX optimisation(1) </div>
			<div>  SPT1RS-224 - operational harmonisation, unique requirements </div>
			<div>  SPT1RS-229 - seamless and selective exchange of components under production </div>
			<div>  SPT1RS-230 - safety logic with generic safety approval </div>
			<div>  SPT1RS-232 - simplified standard safety components </div>
			<div>  SPT1RS-246 - overall CAPEX/ OPEX optimisation(3) </div>
	<div>  SPP-9621 - Decoupling of asset life cycle </div>	<div>  SPT2OD-317 - Decoupling of asset life cycle </div>	





















Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
			<div>  SPT1RS-188 - Changeability and upgradeability(3), simplified integration </div>
<div>  SPP-9554 - CCS shall follow a generic safety approach in encapsulating safety relevant functions within building blocks with a separate safety approvals </div>	<div>  SPP-9542 - TCO optimization </div>	<div>  SPT2OD-306 - TCO Optimization </div>	<div>  SPT1RS-192 - reusable right first time work </div>
			<div>  SPT1RS-197 - overall CAPEX/OPEX optimisation(1) </div>
			<div>  SPT1RS-224 - operational harmonisation, unique requirements </div>
			<div>  SPT1RS-229 - seamless and selective exchange of components under production </div>
			<div>  SPT1RS-230 - safety logic with generic safety approval </div>
			<div>  SPT1RS-232 - simplified standard safety components </div>
			<div>  SPT1RS-246 - overall CAPEX/OPEX optimisation(3) </div>
	<div>  SPP-9619 - Risk assessment quality </div>	<div>  SPT2OD-353 - Risk assessment quality </div>	
	<div>  SPP-9868 - Modular Safety </div>	<div>  SPT2OD-352 - Modular Safety </div>	<div>  SPT1RS-188 - Changeability and upgradeability(3), simplified integration </div>
			<div>  SPT1RS-189 - Changeability and upgradeability(2) </div>
			<div>  SPT1RS-190 - Changeability and upgradeability(1) </div>
			<div>  SPT1RS-191 - changeability </div>
			<div>  SPT1RS-192 - reusable right first time work </div>
			<div>  SPT1RS-218 - modularity </div>
			<div>  SPT1RS-220 - overall CAPEX/OPEX optimisation(2) </div>
			<div>  SPT1RS-221 - standardized architecture(1) </div>

Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
<div></div>	<div></div>	<div></div>	<div>✦ SPT1RS-224 - operational harmonisation, unique requirements</div>
			<div>✦ SPT1RS-227 - Flexible incorporation of innovations</div>
			<div>✦ SPT1RS-230 - safety logic with generic safety approval</div>
			<div>✦ SPT1RS-233 - simple repeatable DevOps</div>
			<div>✦ SPT1RS-234 - viable migration path</div>
			<div>✦ SPT1RS-235 - viable forward/backward compatibility</div>
			<div>✦ SPT1RS-238 - simplify certificates and their impacts</div>
			<div>✦ SPT1RS-241 - efficient decision and working methodolog</div>
			<div>✦ SPT1RS-242 - fast high-quality development</div>
			<div>✦ SPT1RS-246 - overall CAPEX/OPEX optimisation(3)</div>
			<div>✦ SPT1RS-247 - standardized architecture(2)</div>
			<div>✦ SPT1RS-252 - "full" reusability</div>
			<div>✦ SPT1RS-254 - standard know how</div>
<div>🔗 SPP-9555 - CCS shall ensure decoupled lifecycles for its components to simplify asset management</div>	<div>📄 SPP-9542 - TCO optimization</div>	<div>📄 SPT2OD-306 - TCO Optimization</div>	<div>✦ SPT1RS-192 - reusable right first time work</div>
			<div>✦ SPT1RS-197 - overall CAPEX/OPEX optimisation(1)</div>
			<div>✦ SPT1RS-224 - operational harmonisation, unique requirements</div>






















Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
			 SPT1RS-229 - seamless and selective exchange of components under production
			 SPT1RS-230 - safety logic with generic safety approval
			 SPT1RS-232 - simplified standard safety components
			 SPT1RS-246 - overall CAPEX/OPEX optimisation(3)
 SPP-9614 - CCS shall implement an architecture based on standardized interfaces to enable the integration of components from multiple suppliers	 SPP-9613 - Re-use	 SPT2OD-310 - Re-use	 SPT1RS-192 - reusable right first time work
			 SPT1RS-224 - operational harmonisation, unique requirements
			 SPT1RS-230 - safety logic with generic safety approval
			 SPT1RS-232 - simplified standard safety components
	 SPP-9686 - Simplified process for planning and installing CCS systems	 SPT2OD-327 - Simplified process for planning and installing CCS systems	 SPT1RS-192 - reusable right first time work
			 SPT1RS-224 - operational harmonisation, unique requirements
			 SPT1RS-229 - seamless and selective exchange of components under production
			 SPT1RS-230 - safety logic with generic safety approval
 SPP-9620 - CCS shall avoid as much as possible exported Safety-Related Application Conditions	 SPP-9619 - Risk assessment quality	 SPT2OD-353 - Risk assessment quality	
	 SPP-9868 - Modular Safety	 SPT2OD-352 - Modular Safety	 SPT1RS-188 - Changeability and upgradeability(3), simplified integration

Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
<div></div>	<div></div>	<div></div>	<div>✚ SPT1RS-189 - Changeability and upgradeability(2)</div>
			<div>✚ SPT1RS-190 - Changeability and upgradeability(1)</div>
			<div>✚ SPT1RS-191 - changeability</div>
			<div>✚ SPT1RS-192 - reusable right first time work</div>
			<div>✚ SPT1RS-218 - modularity</div>
			<div>✚ SPT1RS-220 - overall CAPEX/ OPEX optimisation(2)</div>
			<div>✚ SPT1RS-221 - standardized architecture(1)</div>
			<div>✚ SPT1RS-224 - operational harmonisation, unique requirements</div>
			<div>✚ SPT1RS-227 - Flexible incorporation of innovations</div>
			<div>✚ SPT1RS-230 - safety logic with generic safety approval</div>
			<div>✚ SPT1RS-233 - simple repeatable DevOps</div>
			<div>✚ SPT1RS-234 - viable migration path</div>
			<div>✚ SPT1RS-235 - viable forward/ backward compatibility</div>
			<div>✚ SPT1RS-238 - simplify certificates and their impacts</div>
			<div>✚ SPT1RS-241 - efficient decision and working methodolog</div>
			<div>✚ SPT1RS-242 - fast high-quality development</div>
			<div>✚ SPT1RS-246 - overall CAPEX/ OPEX optimisation(3)</div>






















Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
			✚ SPT1RS-247 - standardized architecture(2)
			✚ SPT1RS-252 - "full" reusability
			✚ SPT1RS-254 - standard know how
SPP-9644 - CCS shall acquire the static properties of the infrastructure (e.g. tracks with speed and gradient profiles) from a centralised service).	SPP-9472 - Achieving a reduced TCO	SPT2OD-304 - Reduced TCO	
	SPP-9646 - Simplified asset configuration management	SPT2OD-343 - Simplified asset configuration management	
	SPP-9648 - Data acquisition	SPT2OD-332 - Data acquisition	
SPP-9645 - CCS shall acquire system configuration data from a centralised service via a standardised interface, based on EULYNX SMI-xx.	SPP-9472 - Achieving a reduced TCO	SPT2OD-304 - Reduced TCO	
	SPP-9646 - Simplified asset configuration management	SPT2OD-343 - Simplified asset configuration management	
	SPP-9648 - Data acquisition	SPT2OD-332 - Data acquisition	
SPP-9647 - CCS shall acquire the static properties of the trains (e.g. loading gauge) from a centralised service.	SPP-9472 - Achieving a reduced TCO	SPT2OD-304 - Reduced TCO	
	SPP-9646 - Simplified asset configuration management	SPT2OD-343 - Simplified asset configuration management	
	SPP-9648 - Data acquisition	SPT2OD-332 - Data acquisition	
SPP-9660 - CCS shall disclose incompatibilities between its subsystems and their interfaces during runtime.	SPP-9661 - Dynamic change of system configurations	SPT2OD-354 - Dynamic change of system configurations	✚ SPT1RS-192 - reusable right first time work
			✚ SPT1RS-224 - operational harmonisation, unique requirements
			✚ SPT1RS-229 - seamless and selective exchange of components under production
			✚ SPT1RS-230 - safety logic with generic safety approval
			✚ SPT1RS-232 - simplified standard safety components
	SPP-9927 - Simplified, modular architecture to avoid redundancies	SPT2OD-315 - Simplified, modular architecture to avoid redundancies	✚ SPT1RS-192 - reusable right first time work

Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
			✚ SPT1RS-224 - operational harmonisation, unique requirements
			✚ SPT1RS-229 - seamless and selective exchange of components under production
			✚ SPT1RS-232 - simplified standard safety components
 SPP-9679 - CCS shall implement standardised diagnostics functions and standardised interfaces for faster root cause analysis, recovery processes, failure prediction and prevention.	 SPP-9683 - Standard diagnostic features	 SPT2OD-345 - Standard diagnostic features	
	 SPP-9684 - Sharing of diagnostic information	 SPT2OD-346 - Sharing of diagnostic information	
	 SPP-9928 - Reduced amount of skill needs	 SPT2OD-320 - Reduced amount of skill needs	✚ SPT1RS-245 - automate operators knowledge management
	 SPP-10111 - Data center deployment	 SPT2OD-334 - Data center deployment	✚ SPT1RS-193 - automate lifecycle processes ✚ SPT1RS-233 - simple repeatable DevOps
 SPP-9680 - CCS shall provide diagnostic information based on the generic part of the EULYNX/EU-Rail System Pillar standardised diagnostic interface, called SDI-xx.	 SPP-9683 - Standard diagnostic features	 SPT2OD-345 - Standard diagnostic features	
 SPP-9856 - Usage of FRMCS and GSM-R	 SPP-9927 - Simplified, modular architecture to avoid redundancies	 SPT2OD-315 - Simplified, modular architecture to avoid redundancies	✚ SPT1RS-192 - reusable right first time work
			✚ SPT1RS-224 - operational harmonisation, unique requirements
			✚ SPT1RS-229 - seamless and selective exchange of components under production
			✚ SPT1RS-232 - simplified standard safety components
 SPP-9870 - CCS shall follow modular design principles	 SPP-9472 - Achieving a reduced TCO	 SPT2OD-304 - Reduced TCO	
	 SPP-9868 - Modular Safety	 SPT2OD-352 - Modular Safety	✚ SPT1RS-188 - Changeability and upgradeability(3), simplified integration
			✚ SPT1RS-189 - Changeability and upgradeability(2)




































Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
			✚ SPT1RS-190 - Changeability and upgradeability(1)
			✚ SPT1RS-191 - changeability
			✚ SPT1RS-192 - reusable right first time work
			✚ SPT1RS-218 - modularity
			✚ SPT1RS-220 - overall CAPEX/ OPEX optimisation(2)
			✚ SPT1RS-221 - standardized architecture(1)
			✚ SPT1RS-224 - operational harmonisation, unique requirements
			✚ SPT1RS-227 - Flexible incorporation of innovations
			✚ SPT1RS-230 - safety logic with generic safety approval
			✚ SPT1RS-233 - simple repeatable DevOps
			✚ SPT1RS-234 - viable migration path
			✚ SPT1RS-235 - viable forward/ backward compatibility
			✚ SPT1RS-238 - simplify certificates and their impacts
			✚ SPT1RS-241 - efficient decision and working methodolog
			✚ SPT1RS-242 - fast high-quality development
			✚ SPT1RS-246 - overall CAPEX/ OPEX optimisation(3)
			✚ SPT1RS-247 - standardized architecture(2)
			✚ SPT1RS-252 - "full" reusability

Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
	 SPP-9927 - Simplified, modular architecture to avoid redundancies	 SPT2OD-315 - Simplified, modular architecture to avoid redundancies	 SPT1RS-254 - standard know how
			 SPT1RS-192 - reusable right first time work
			 SPT1RS-224 - operational harmonisation, unique requirements
			 SPT1RS-229 - seamless and selective exchange of components under production
 SPP-9894 - CCS shall implement an architecture based on standardised interfaces to facilitate independent safety cases and approval processes for each subsystem	 SPP-9542 - TCO optimization	 SPT2OD-306 - TCO Optimization	 SPT1RS-192 - reusable right first time work
			 SPT1RS-197 - overall CAPEX/OPEX optimisation(1)
			 SPT1RS-224 - operational harmonisation, unique requirements
			 SPT1RS-229 - seamless and selective exchange of components under production
			 SPT1RS-230 - safety logic with generic safety approval
			 SPT1RS-232 - simplified standard safety components
	 SPP-9868 - Modular Safety	 SPT2OD-352 - Modular Safety	 SPT1RS-246 - overall CAPEX/OPEX optimisation(3)
			 SPT1RS-188 - Changeability and upgradeability(3), simplified integration
			 SPT1RS-189 - Changeability and upgradeability(2)
			 SPT1RS-190 - Changeability and upgradeability(1)













Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
<div></div>	<div></div>	<div></div>	<div>✚ SPT1RS-191 - changeability</div>
			<div>✚ SPT1RS-192 - reusable right first time work</div>
			<div>✚ SPT1RS-218 - modularity</div>
			<div>✚ SPT1RS-220 - overall CAPEX/ OPEX optimisation(2)</div>
			<div>✚ SPT1RS-221 - standardized architecture(1)</div>
			<div>✚ SPT1RS-224 - operational harmonisation, unique requirements</div>
			<div>✚ SPT1RS-227 - Flexible incorporation of innovations</div>
			<div>✚ SPT1RS-230 - safety logic with generic safety approval</div>
			<div>✚ SPT1RS-233 - simple repeatable DevOps</div>
			<div>✚ SPT1RS-234 - viable migration path</div>
			<div>✚ SPT1RS-235 - viable forward/ backward compatibility</div>
			<div>✚ SPT1RS-238 - simplify certificates and their impacts</div>
			<div>✚ SPT1RS-241 - efficient decision and working methodolog</div>
			<div>✚ SPT1RS-242 - fast high-quality development</div>
			<div>✚ SPT1RS-246 - overall CAPEX/ OPEX optimisation(3)</div>
			<div>✚ SPT1RS-247 - standardized architecture(2)</div>
			<div>✚ SPT1RS-252 - "full" reusability</div>
			<div>✚ SPT1RS-254 - standard know how</div>


























Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
 SPP-9899 - Stakeholder Requirement Test 1			
 SPP-9901 - CCS shall be designed in such a way that specified components can be replaced and interconnected without the need to re-approve other components	 SPP-9615 - Upgradeability	 SPT2OD-311 - Upgradeability	 SPT1RS-182 - systems: extensible capacity, scalability(1)
			 SPT1RS-188 - Changeability and upgradeability(3), simplified integration
			 SPT1RS-194 - independent lifecycle, simple exchange
			 SPT1RS-198 - automate lifecycle processes, independent lifecycle
			 SPT1RS-212 - non invasive/noticeable cyber security
			 SPT1RS-213 - local environment cyber security
			 SPT1RS-235 - viable forward/backward compatibility
	 SPP-9868 - Modular Safety	 SPT2OD-352 - Modular Safety	 SPT1RS-188 - Changeability and upgradeability(3), simplified integration
			 SPT1RS-189 - Changeability and upgradeability(2)
			 SPT1RS-190 - Changeability and upgradeability(1)
			 SPT1RS-191 - changeability
			 SPT1RS-192 - reusable right first time work
			 SPT1RS-218 - modularity
			 SPT1RS-220 - overall CAPEX/OPEX optimisation(2)
			 SPT1RS-221 - standardized architecture(1)































Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
<div></div>	<div></div>	<div></div>	<div>✚ SPT1RS-224 - operational harmonisation, unique requirements</div>
			<div>✚ SPT1RS-227 - Flexible incorporation of innovations</div>
			<div>✚ SPT1RS-230 - safety logic with generic safety approval</div>
			<div>✚ SPT1RS-233 - simple repeatable DevOps</div>
			<div>✚ SPT1RS-234 - viable migration path</div>
			<div>✚ SPT1RS-235 - viable forward/backward compatibility</div>
			<div>✚ SPT1RS-238 - simplify certificates and their impacts</div>
			<div>✚ SPT1RS-241 - efficient decision and working methodolog</div>
			<div>✚ SPT1RS-242 - fast high-quality development</div>
			<div>✚ SPT1RS-246 - overall CAPEX/OPEX optimisation(3)</div>
			<div>✚ SPT1RS-247 - standardized architecture(2)</div>
			<div>✚ SPT1RS-252 - "full" reusability</div>
			<div>✚ SPT1RS-254 - standard know how</div>
<div>🔗 SPP-9904 - CCS shall support the tool chain provided by centralised services e.g. regarding diagnostics, configuration management, topology update</div>	<div>📄 SPP-7690 - Competitiveness through Merged Concept harmonized standardized processes, specifications and architectures</div>	<div>📄 SPT2OD-235 - Competitiveness</div>	
	<div>📄 SPP-9903 - Security by Design</div>	<div>📄 SPT2OD-349 - Security by Design</div>	<div>✚ SPT1RS-212 - non invasive/noticeable cyber security</div> <div>✚ SPT1RS-213 - local environment cyber security</div>
	<div>📄 SPP-9928 - Reduced amount of skill needs</div>	<div>📄 SPT2OD-320 - Reduced amount of skill needs</div>	

Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
			 SPT1RS-245 - automate operators knowledge management
	 SPP-10111 - Data center deployment	 SPT2OD-334 - Data center deployment	 SPT1RS-193 - automate lifecycle processes
			 SPT1RS-233 - simple repeatable DevOps
 SPP-9905 - CCS system shall be developed using a security-by-design process, in order to avoid attacks to hardware or software components	 SPP-9903 - Security by Design	 SPT2OD-349 - Security by Design	 SPT1RS-212 - non invasive/noticeable cyber security
			 SPT1RS-213 - local environment cyber security
 SPP-9906 - CCS system shall be protected by managing access in centralised access and identification Systems	 SPP-9903 - Security by Design	 SPT2OD-349 - Security by Design	 SPT1RS-212 - non invasive/noticeable cyber security
			 SPT1RS-213 - local environment cyber security
 SPP-9907 - CCS shall implement security according to the security-by-design process			
 SPP-9942 - Use standard hardware components	 SPP-9927 - Simplified, modular architecture to avoid redundancies	 SPT2OD-315 - Simplified, modular architecture to avoid redundancies	 SPT1RS-192 - reusable right first time work
			 SPT1RS-224 - operational harmonisation, unique requirements
			 SPT1RS-229 - seamless and selective exchange of components under production
			 SPT1RS-232 - simplified standard safety components
	 SPP-9928 - Reduced amount of skill needs	 SPT2OD-320 - Reduced amount of skill needs	 SPT1RS-245 - automate operators knowledge management
	 SPP-9943 - Reduce special hardware	 SPT2OD-333 - Reduced special hardware	 SPT1RS-196 - increase market size by standardisation
 SPP-10109 - CCS shall support system deployment on centralised data centers.	 SPP-10108 - Reduction of trackside CCS assets	 SPT2OD-326 - Reduction of trackside CCS assets	 SPT1RS-195 - less trackside assets
			 SPT1RS-197 - overall CAPEX/OPEX optimisation(1)
			 SPT1RS-200 - availability: less assets























Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
			✚ SPT1RS-246 - overall CAPEX/OPEX optimisation(3)
	📄 SPP-10111 - Data center deployment	📄 SPT2OD-334 - Data center deployment	✚ SPT1RS-193 - automate lifecycle processes
			✚ SPT1RS-233 - simple repeatable DevOps
🔗 SPP-10110 - CCS shall support the separation between the central system and decentralised lineside devices	📄 SPP-10108 - Reduction of trackside CCS assets	📄 SPT2OD-326 - Reduction of trackside CCS assets	✚ SPT1RS-195 - less trackside assets
			✚ SPT1RS-197 - overall CAPEX/OPEX optimisation(1)
			✚ SPT1RS-200 - availability: less assets
			✚ SPT1RS-246 - overall CAPEX/OPEX optimisation(3)
	📄 SPP-10111 - Data center deployment	📄 SPT2OD-334 - Data center deployment	✚ SPT1RS-193 - automate lifecycle processes
			✚ SPT1RS-233 - simple repeatable DevOps
🔗 SPP-10174 - Decoupling of hardware and software components	📄 SPP-7690 - Competitiveness through Merged Concept harmonized standardized processes, specifications and architectures	📄 SPT2OD-235 - Competitiveness	
	📄 SPP-9495 - Positive business case	📄 SPT2OD-305 - Positive business case	
	📄 SPP-9615 - Upgradeability	📄 SPT2OD-311 - Upgradeability	✚ SPT1RS-182 - systems: extensible capacity, scalability(1)
			✚ SPT1RS-188 - Changeability and upgradeability(3), simplified integration
			✚ SPT1RS-194 - independent lifecycle, simple exchange
			✚ SPT1RS-198 - automate lifecycle processes, independent lifecycle
			✚ SPT1RS-212 - non invasive/noticeable cyber security

Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
			✚ SPT1RS-213 - local environment cyber security
			✚ SPT1RS-235 - viable forward/backward compatibility
			✚ SPT1RS-247 - standardized architecture(2)
	 SPP-9927 - Simplified, modular architecture to avoid redundancies	 SPT2OD-315 - Simplified, modular architecture to avoid redundancies	✚ SPT1RS-192 - reusable right first time work
			✚ SPT1RS-224 - operational harmonisation, unique requirements
			✚ SPT1RS-229 - seamless and selective exchange of components under production
	 SPP-9943 - Reduce special hardware	 SPT2OD-333 - Reduced special hardware	✚ SPT1RS-232 - simplified standard safety components
			✚ SPT1RS-196 - increase market size by standardisation
 SPP-10221 - Support for backward compatibility	 SPP-10178 - Improved change process and backwards compatibility		
 SPP-10230 - Integration of external devices	 SPP-10228 - Selective on demand replacements	 SPT2OD-328 - Selective on demand replacements	✚ SPT1RS-197 - overall CAPEX/OPEX optimisation(1)
			✚ SPT1RS-246 - overall CAPEX/OPEX optimisation(3)
 SPP-10231 - Independence from pre-engineered safety critical logic	 SPP-6604 - Optimizing track capacity	 SPT2OD-283 - Optimizing track capacity	✚ SPT1RS-157 - rapid response to capacity request
			✚ SPT1RS-170 - increase capacity
			✚ SPT1RS-182 - systems: extensible capacity, scalability(1)
			✚ SPT1RS-184 - flexible use of infra capacity
			✚ SPT1RS-185 - predict capacity needs(2)


























Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
	 SPP-7220 - Safety assessment on runtime	 SPT2OD-277 - Safety assessment on run time	 SPT1RS-226 - systems: extensible capacity, scalability(2)
			 SPT1RS-192 - reusable right first time work
			 SPT1RS-229 - seamless and selective exchange of components under production
			 SPT1RS-230 - safety logic with generic safety approval
 SPP-10232 - Automated triggering of mitigations	 SPP-6604 - Optimizing track capacity	 SPT2OD-283 - Optimizing track capacity	 SPT1RS-157 - rapid response to capacity request
			 SPT1RS-170 - increase capacity
			 SPT1RS-182 - systems: extensible capacity, scalability(1)
			 SPT1RS-184 - flexible use of infra capacity
			 SPT1RS-185 - predict capacity needs(2)
	 SPP-7220 - Safety assessment on runtime	 SPT2OD-277 - Safety assessment on run time	 SPT1RS-226 - systems: extensible capacity, scalability(2)
			 SPT1RS-192 - reusable right first time work
			 SPT1RS-229 - seamless and selective exchange of components under production
			 SPT1RS-230 - safety logic with generic safety approval
			 SPT1RS-232 - simplified standard safety components
 SPP-10233 - Supervision methodology	 SPP-6670 - ATO for normal and degraded modes	 SPT2OD-275 - ATO for normal and degraded modes	 SPT1RS-179 - ATO(1)




















Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
			<div>  SPT1RS-186 - ATO(2), automated shunting </div>
<div>  SPP-10234 - Compliance with safety-critical principles </div>	<div>  SPP-6670 - ATO for normal and degraded modes </div>	<div>  SPT2OD-275 - ATO for normal and degraded modes </div>	<div>  SPT1RS-179 - ATO(1) </div>
			<div>  SPT1RS-186 - ATO(2), automated shunting </div>
<div>  SPP-10235 - Adherence to operational procedures </div>	<div>  SPP-6670 - ATO for normal and degraded modes </div>	<div>  SPT2OD-275 - ATO for normal and degraded modes </div>	<div>  SPT1RS-179 - ATO(1) </div>
			<div>  SPT1RS-186 - ATO(2), automated shunting </div>
<div>  SPP-10245 - Upgradeability of adjacent systems </div>	<div>  SPP-7220 - Safety assessment on runtime </div>	<div>  SPT2OD-277 - Safety assessment on run time </div>	<div>  SPT1RS-192 - reusable right first time work </div>
			<div>  SPT1RS-229 - seamless and selective exchange of components under production </div>
			<div>  SPT1RS-230 - safety logic with generic safety approval </div>
			<div>  SPT1RS-232 - simplified standard safety components </div>
	<div>  SPP-7645 - Long-term evolution: modularisation </div>	<div>  SPT2OD-234 - long-term evolution: modularisation </div>	
	<div>  SPP-9039 - Continuous supervision of railway production </div>	<div>  SPT2OD-280 - Continuous supervision of railway production </div>	<div>  SPT1RS-229 - seamless and selective exchange of components under production </div>
	<div>  SPP-9927 - Simplified, modular architecture to avoid redundancies </div>	<div>  SPT2OD-315 - Simplified, modular architecture to avoid redundancies </div>	<div>  SPT1RS-192 - reusable right first time work </div>
			<div>  SPT1RS-224 - operational harmonisation, unique requirements </div>
			<div>  SPT1RS-229 - seamless and selective exchange of components under production </div>
			<div>  SPT1RS-232 - simplified standard safety components </div>
	<div>  SPP-10178 - Improved change process and backwards compatibility </div>		


























Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
SPP-10246 - Integration of external devices	SPP-10228 - Selective on demand replacements	SPT2OD-328 - Selective on demand replacements	SPT1RS-197 - overall CAPEX/OPEX optimisation(1)
			SPT1RS-246 - overall CAPEX/OPEX optimisation(3)
	SPP-7220 - Safety assessment on runtime	SPT2OD-277 - Safety assessment on run time	SPT1RS-192 - reusable right first time work
			SPT1RS-229 - seamless and selective exchange of components under production
			SPT1RS-230 - safety logic with generic safety approval
			SPT1RS-232 - simplified standard safety components
	SPP-7645 - Long-term evolution: modularisation	SPT2OD-234 - long-term evolution: modularisation	
	SPP-9039 - Continuous supervision of railway production	SPT2OD-280 - Continuous supervision of railway production	SPT1RS-229 - seamless and selective exchange of components under production
	SPP-9927 - Simplified, modular architecture to avoid redundancies	SPT2OD-315 - Simplified, modular architecture to avoid redundancies	SPT1RS-192 - reusable right first time work
			SPT1RS-224 - operational harmonisation, unique requirements
			SPT1RS-229 - seamless and selective exchange of components under production
			SPT1RS-232 - simplified standard safety components
	SPP-10178 - Improved change process and backwards compatibility		
	SPP-10228 - Selective on demand replacements	SPT2OD-328 - Selective on demand replacements	SPT1RS-197 - overall CAPEX/OPEX optimisation(1)
			SPT1RS-246 - overall CAPEX/OPEX optimisation(3)
	SPP-7220 - Safety assessment on runtime	SPT2OD-277 - Safety assessment on run time	



















Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
 SPP-10253 - Allow configuration of Generic Application according to local needs within predefined limits			 SPT1RS-192 - reusable right first time work
			 SPT1RS-229 - seamless and selective exchange of components under production
			 SPT1RS-230 - safety logic with generic safety approval
			 SPT1RS-232 - simplified standard safety components
	 SPP-9613 - Re-use	 SPT2OD-310 - Re-use	 SPT1RS-192 - reusable right first time work
			 SPT1RS-224 - operational harmonisation, unique requirements
			 SPT1RS-230 - safety logic with generic safety approval
			 SPT1RS-232 - simplified standard safety components
	 SPP-9661 - Dynamic change of system configurations	 SPT2OD-354 - Dynamic change of system configurations	 SPT1RS-192 - reusable right first time work
			 SPT1RS-224 - operational harmonisation, unique requirements
			 SPT1RS-229 - seamless and selective exchange of components under production
			 SPT1RS-230 - safety logic with generic safety approval
			 SPT1RS-232 - simplified standard safety components
	 SPP-9868 - Modular Safety	 SPT2OD-352 - Modular Safety	 SPT1RS-188 - Changeability and upgradeability(3), simplified integration
			 SPT1RS-189 - Changeability and upgradeability(2)

Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
<div></div>	<div></div>	<div></div>	<div>✚ SPT1RS-190 - Changeability and upgradeability(1)</div>
			<div>✚ SPT1RS-191 - changeability</div>
			<div>✚ SPT1RS-192 - reusable right first time work</div>
			<div>✚ SPT1RS-218 - modularity</div>
			<div>✚ SPT1RS-220 - overall CAPEX/ OPEX optimisation(2)</div>
			<div>✚ SPT1RS-221 - standardized architecture(1)</div>
			<div>✚ SPT1RS-224 - operational harmonisation, unique requirements</div>
			<div>✚ SPT1RS-227 - Flexible incorporation of innovations</div>
			<div>✚ SPT1RS-230 - safety logic with generic safety approval</div>
			<div>✚ SPT1RS-233 - simple repeatable DevOps</div>
			<div>✚ SPT1RS-234 - viable migration path</div>
			<div>✚ SPT1RS-235 - viable forward/ backward compatibility</div>
			<div>✚ SPT1RS-238 - simplify certificates and their impacts</div>
			<div>✚ SPT1RS-241 - efficient decision and working methodolog</div>
			<div>✚ SPT1RS-242 - fast high-quality development</div>
			<div>✚ SPT1RS-246 - overall CAPEX/ OPEX optimisation(3)</div>
			<div>✚ SPT1RS-247 - standardized architecture(2)</div>
			<div>✚ SPT1RS-252 - "full" reusability</div>






































Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
			 SPT1RS-254 - standard know how
 SPP-10254 - Enable implementation of Generic Products with Safety Cases independent of Configuration Data	 SPP-7220 - Safety assessment on runtime	 SPT2OD-277 - Safety assessment on run time	 SPT1RS-192 - reusable right first time work
			 SPT1RS-229 - seamless and selective exchange of components under production
			 SPT1RS-230 - safety logic with generic safety approval
			 SPT1RS-232 - simplified standard safety components
	 SPP-9472 - Achieving a reduced TCO	 SPT2OD-304 - Reduced TCO	
	 SPP-9495 - Positive business case	 SPT2OD-305 - Positive business case	
	 SPP-9613 - Re-use	 SPT2OD-310 - Re-use	 SPT1RS-192 - reusable right first time work
			 SPT1RS-224 - operational harmonisation, unique requirements
			 SPT1RS-230 - safety logic with generic safety approval
			 SPT1RS-232 - simplified standard safety components
	 SPP-9686 - Simplified process for planning and installing CCS systems	 SPT2OD-327 - Simplified process for planning and installing CCS systems	 SPT1RS-192 - reusable right first time work
			 SPT1RS-224 - operational harmonisation, unique requirements
			 SPT1RS-229 - seamless and selective exchange of components under production
			 SPT1RS-230 - safety logic with generic safety approval
			 SPT1RS-232 - simplified standard safety components
































Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
<div></div>	<div> SPP-9868 - Modular Safety</div>	<div> SPT2OD-352 - Modular Safety</div>	<div> SPT1RS-188 - Changeability and upgradeability(3), simplified integration</div>
			<div> SPT1RS-189 - Changeability and upgradeability(2)</div>
			<div> SPT1RS-190 - Changeability and upgradeability(1)</div>
			<div> SPT1RS-191 - changeability</div>
			<div> SPT1RS-192 - reusable right first time work</div>
			<div> SPT1RS-218 - modularity</div>
			<div> SPT1RS-220 - overall CAPEX/ OPEX optimisation(2)</div>
			<div> SPT1RS-221 - standardized architecture(1)</div>
			<div> SPT1RS-224 - operational harmonisation, unique requirements</div>
			<div> SPT1RS-227 - Flexible incorporation of innovations</div>
			<div> SPT1RS-230 - safety logic with generic safety approval</div>
			<div> SPT1RS-233 - simple repeatable DevOps</div>
			<div> SPT1RS-234 - viable migration path</div>
			<div> SPT1RS-235 - viable forward/ backward compatibility</div>
			<div> SPT1RS-238 - simplify certificates and their impacts</div>
			<div> SPT1RS-241 - efficient decision and working methodolog</div>
			<div> SPT1RS-242 - fast high-quality development</div>





















Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
 SPP-10255 - Enable implementation of Generic Applications with Safety Cases independent of Configuration Data			 SPT1RS-246 - overall CAPEX/OPEX optimisation(3)
			 SPT1RS-247 - standardized architecture(2)
			 SPT1RS-252 - "full" reusability
			 SPT1RS-254 - standard know how
	 SPP-7220 - Safety assessment on runtime	 SPT2OD-277 - Safety assessment on run time	 SPT1RS-192 - reusable right first time work
			 SPT1RS-229 - seamless and selective exchange of components under production
			 SPT1RS-230 - safety logic with generic safety approval
			 SPT1RS-232 - simplified standard safety components
	 SPP-9472 - Achieving a reduced TCO	 SPT2OD-304 - Reduced TCO	
	 SPP-9495 - Positive business case	 SPT2OD-305 - Positive business case	
	 SPP-9613 - Re-use	 SPT2OD-310 - Re-use	 SPT1RS-192 - reusable right first time work
			 SPT1RS-224 - operational harmonisation, unique requirements
			 SPT1RS-230 - safety logic with generic safety approval
			 SPT1RS-232 - simplified standard safety components
	 SPP-9686 - Simplified process for planning and installing CCS systems	 SPT2OD-327 - Simplified process for planning and installing CCS systems	 SPT1RS-192 - reusable right first time work
			 SPT1RS-224 - operational harmonisation, unique requirements

































Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
			<div> SPT1RS-229 - seamless and selective exchange of components under production</div>
			<div> SPT1RS-230 - safety logic with generic safety approval</div>
			<div> SPT1RS-232 - simplified standard safety components</div>
	<div> SPP-9868 - Modular Safety</div>	<div> SPT2OD-352 - Modular Safety</div>	<div> SPT1RS-188 - Changeability and upgradeability(3), simpilified integration</div>
			<div> SPT1RS-189 - Changeability and upgradeability(2)</div>
			<div> SPT1RS-190 - Changeability and upgradeability(1)</div>
			<div> SPT1RS-191 - changeability</div>
			<div> SPT1RS-192 - reusable right first time work</div>
			<div> SPT1RS-218 - modularity</div>
			<div> SPT1RS-220 - overall CAPEX/ OPEX optimisation(2)</div>
			<div> SPT1RS-221 - standardized architecture(1)</div>
			<div> SPT1RS-224 - operational harmonisation, unique requirements</div>
			<div> SPT1RS-227 - Flexible incorporation of innovations</div>
			<div> SPT1RS-230 - safety logic with generic safety approval</div>
			<div> SPT1RS-233 - simple repeatable DevOps</div>
			<div> SPT1RS-234 - viable migration path</div>
















Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
			✦ SPT1RS-235 - viable forward/backward compatibility
			✦ SPT1RS-238 - simplify certificates and their impacts
			✦ SPT1RS-241 - efficient decision and working methodolog
			✦ SPT1RS-242 - fast high-quality development
			✦ SPT1RS-246 - overall CAPEX/OPEX optimisation(3)
			✦ SPT1RS-247 - standardized architecture(2)
			✦ SPT1RS-252 - "full" reusability
			✦ SPT1RS-254 - standard know how
🔗 SPP-10258 - Ensure fast response times	📄 SPP-9034 - CCS shall offer an optimized, precise and automized basic functionality to control and report any type of track usage	🔗 SPT2OD-274 - Traffic CS shall offer an optimized and automized basic functionality to control and report any type of track usage	
🔗 SPP-10259 - Timely reservation of track capacities	📄 SPP-6930 - Optimizing track capacity (SPT2OD-329)	🔗 SPT2OD-329 - Optimizing track capacity	✦ SPT1RS-157 - rapid response to capacity request
			✦ SPT1RS-170 - increase capacity
			✦ SPT1RS-173 - predict capacity needs(1)
			✦ SPT1RS-176 - deep/optimized plan
			✦ SPT1RS-184 - flexible use of infra capacity
			✦ SPT1RS-185 - predict capacity needs(2)
	📄 SPP-9034 - CCS shall offer an optimized, precise and automized basic functionality to control and report any type of track usage	🔗 SPT2OD-274 - Traffic CS shall offer an optimized and automized basic functionality to control and report any type of track usage	
🔗 SPP-10260 - Prompt execution of requested plans			

Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
	 SPP-9034 - CCS shall offer an optimized, precise and automatized basic functionality to control and report any type of track usage	 SPT2OD-274 - Traffic CS shall offer an optimized and automatized basic functionality to control and report any type of track usage	
 SPP-14106 - CCS shall interface to centralised security services	 SPP-9903 - Security by Design	 SPT2OD-349 - Security by Design	 SPT1RS-212 - non invasive/noticeable cyber security
			 SPT1RS-213 - local environment cyber security
 SPP-14117 - An harmonized process shall be defined to acquire data configuration related with train composition	 SPP-9648 - Data acquisition	 SPT2OD-332 - Data acquisition	
 SPP-14118 - An harmonized process shall be defined for automatic generation of data configuration using different technologies	 SPP-9648 - Data acquisition	 SPT2OD-332 - Data acquisition	
 SPP-14132 - CCS subsystems and their interfaces version compatibility	 SPP-10107 - Mixed ETCS System Versions	 SPT2OD-330 - Mixed system versions	 SPT1RS-224 - operational harmonisation, unique requirements
			 SPT1RS-229 - seamless and selective exchange of components under production
			 SPT1RS-230 - safety logic with generic safety approval
 SPP-14133 - CCS system shall provide standardised interfaces	 SPP-10107 - Mixed ETCS System Versions	 SPT2OD-330 - Mixed system versions	 SPT1RS-224 - operational harmonisation, unique requirements
			 SPT1RS-229 - seamless and selective exchange of components under production
			 SPT1RS-230 - safety logic with generic safety approval
 SPP-14326 - CCS shall use reference models, reference laboratories and automated compliance testing in accordance with the European approval procedure (CENELEC phases 6 to 9)	 SPP-6874 - Scalability of skills	 SPT2OD-321 - Scalability of skills	 SPT1RS-216 - Viable skill requirements
	 SPP-9495 - Positive business case	 SPT2OD-305 - Positive business case	
	 SPP-9619 - Risk assessment quality	 SPT2OD-353 - Risk assessment quality	
	 SPP-9621 - Decoupling of asset life cycle	 SPT2OD-317 - Decoupling of asset life cycle	 SPT1RS-188 - Changeability and upgradeability(3), simplified integration
		 SPT2OD-327 - Simplified process for planning and installing CCS systems	

Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
	 SPP-9686 - Simplified process for planning and installing CCS systems		 SPT1RS-192 - reusable right first time work
			 SPT1RS-224 - operational harmonisation, unique requirements
			 SPT1RS-229 - seamless and selective exchange of components under production
			 SPT1RS-230 - safety logic with generic safety approval
			 SPT1RS-232 - simplified standard safety components
 SPP-15529 - CCS shall support carrying out maintenance activities under production without blocking a track	 SPP-9269 - Reduce railway service production impact	 SPT2OD-293 - Reduce production impact	 SPT1RS-151 - enhanced information for plan optimisation(3)
			 SPT1RS-152 - enhanced information for plan optimisation(2)
			 SPT1RS-208 - automated field force communication
			 SPT1RS-229 - seamless and selective exchange of components under production
 SPP-15837 - Level of backward compatibility for Traffic CS	 SPP-10178 - Improved change process and backwards compatibility		
 SPP-28337 - Standardised interfaces (FFFIS, FIS) to decouple life cycles and safety cases	 SPP-6590 - Standard Components	 SPT2OD-233 - standard components	
	 SPT2TRAFFIC-5758 - Standard components	 SPT2OD-233 - standard components	
 SPP-28338 - Provide a scalable and adaptable system architecture which is suitable for different contexts	 SPP-7268 - Stable and backward compatible air-gap interface	 SPT2OD-284 - Stable and backwards compatible air gap interface	
	 SPP-7645 - Long-term evolution: modularisation	 SPT2OD-234 - long-term evolution: modularisation	
	 SPP-9472 - Achieving a reduced TCO	 SPT2OD-304 - Reduced TCO	
	 SPP-9615 - Upgradeability	 SPT2OD-311 - Upgradeability	 SPT1RS-182 - systems: extensible capacity, scalability(1)
			 SPT1RS-188 - Changeability and upgradeability(3), simplified integration

Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
			 SPT1RS-194 - independent lifecycle, simple exchange
			 SPT1RS-198 - automate lifecycle processes, independent lifecycle
			 SPT1RS-212 - non invasive/noticeable cyber security
			 SPT1RS-213 - local environment cyber security
			 SPT1RS-235 - viable forward/backward compatibility
			 SPT1RS-247 - standardized architecture(2)
	 SPT2TRAFFIC-4829 - Upgradeability	 SPT2OD-311 - Upgradeability	 SPT1RS-182 - systems: extensible capacity, scalability(1)
			 SPT1RS-188 - Changeability and upgradeability(3), simplified integration
			 SPT1RS-194 - independent lifecycle, simple exchange
			 SPT1RS-198 - automate lifecycle processes, independent lifecycle
			 SPT1RS-212 - non invasive/noticeable cyber security
			 SPT1RS-213 - local environment cyber security
			 SPT1RS-235 - viable forward/backward compatibility
			 SPT1RS-247 - standardized architecture(2)
	 SPT2TRAFFIC-4854 - Reduced TCO	 SPT2OD-304 - Reduced TCO	
	 SPT2TRAFFIC-5784 - Stable and backward compatible air gap interface	 SPT2OD-284 - Stable and backwards compatible air gap interface	

Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
	 SPT2TRAFFIC-6109 - long-term evolution: modularisation	 SPT2OD-234 - long-term evolution: modularisation	
 SPP-28346 - Implement interface designs that enable the determination of smallest common set of shareable functions	 SPP-6670 - ATO for normal and degraded modes	 SPT2OD-275 - ATO for normal and degraded modes	 SPT1RS-179 - ATO(1)
			 SPT1RS-186 - ATO(2), automated shunting
	 SPP-7268 - Stable and backward compatible air-gap interface	 SPT2OD-284 - Stable and backwards compatible air gap interface	
	 SPP-9615 - Upgradeability	 SPT2OD-311 - Upgradeability	 SPT1RS-182 - systems: extensible capacity, scalability(1)
			 SPT1RS-188 - Changeability and upgradeability(3), simplified integration
			 SPT1RS-194 - independent lifecycle, simple exchange
			 SPT1RS-198 - automate lifecycle processes, independent lifecycle
			 SPT1RS-212 - non invasive/noticeable cyber security
 SPP-28347 - Handling of train and shunting movements in Traffic CS	 SPP-6670 - ATO for normal and degraded modes	 SPT2OD-275 - ATO for normal and degraded modes	 SPT1RS-179 - ATO(1)
			 SPT1RS-186 - ATO(2), automated shunting
 SPP-28351 - EULYNX Standard Communication Interfaces SCI-xx	 SPP-6590 - Standard Components	 SPT2OD-233 - standard components	
	 SPP-9621 - Decoupling of asset life cycle	 SPT2OD-317 - Decoupling of asset life cycle	 SPT1RS-188 - Changeability and upgradeability(3), simplified integration
 SPP-28352 - Enable the system integration of legacy systems	 SPP-9495 - Positive business case	 SPT2OD-305 - Positive business case	
	 SPP-9542 - TCO optimization	 SPT2OD-306 - TCO Optimization	



Stakeholder Requirements	Operational Vision Breakdown	Operational Vision	Common Business Objective
 SPP-28353 - As a Supplier, I want a Traffic CS system implementing an architecture based on standardized interfaces			 SPT1RS-192 - reusable right first time work
			 SPT1RS-197 - overall CAPEX/OPEX optimisation(1)
			 SPT1RS-224 - operational harmonisation, unique requirements
			 SPT1RS-229 - seamless and selective exchange of components under production
			 SPT1RS-230 - safety logic with generic safety approval
			 SPT1RS-232 - simplified standard safety components
			 SPT1RS-246 - overall CAPEX/OPEX optimisation(3)
 SPP-28354 - Able to provide a standard interface to manage handover of trains between SERA equipped areas	 SPP-6670 - ATO for normal and degraded modes	 SPT2OD-275 - ATO for normal and degraded modes	 SPT1RS-179 - ATO(1)
			 SPT1RS-186 - ATO(2), automated shunting
	 SPP-7268 - Stable and backward compatible air-gap interface	 SPT2OD-284 - Stable and backwards compatible air gap interface	









Stakeholder Requirements - ETCS L2 Rulebook
















































No Stakeholder Requirements available yet.









































Stakeholder Requirements - CCS System
















































This traceability report shows the coverage of the Stakeholder Requirements by the CCS-System (System Level 3). A Stakeholder Requirement can be covered via one of the following options:














































- Coverage via a System Capability described in the  SPP-18048 - [System Definition CCS-System](#):
Stakeholder Requirements covered by this option are linked to a work item of type C2P-* (e.g. C2P-Funktion, C2P-Functional Exchange, etc.), see table below.
- Coverage via a System Capability described in the  SPP-18062 - [TCS_System Requirement Specification CCS System](#):
Stakeholder Requirements covered by this option are linked to a work item of type System requirement, see table below.
- Intentionally not yet covered Stakeholder Requirements are linked to a work item of type Issue













































Stakeholder Requirements	CCS-System	Type
 SPP-6662 - Limited allocation of infrastructure resources to train movements	 SPP-17081 - Verify CCS System Definition to include	 Issue
 SPP-6678 - CCS shall verify and process Traffic Management System requests to create, activate, amend, deactivate or delete track usage restrictions considering TMS optimized plan.	 SPMS-2159 - Control usage restriction areas	 C2P-Function
	 SPMS-2215 - Usage restriction state	 C2P-Functional Exchange
	 SPMS-2216 - Usage restriction state	 C2P-Functional Exchange
	 SPMS-2219 - Usage restriction state	 C2P-Functional Exchange
	 SPMS-2357 - Required operational traffic plan	 C2P-Functional Exchange
 SPP-6684 - CCS shall authorise movements only if they don't represent a danger for railway actors (such as driver or passengers), or the infrastructure and rolling stock assets, or non-track-bound track users or mobile objects and if these movements are part of plan or actions derived from degraded operation.	 SPMS-2137 - Ensure safe movement of trains	 C2P-Function
	 SPMS-2167 - Supervise state of railway operation	 C2P-Function
	 SPMS-2248 - Authorised distance and speed restriction	 C2P-Functional Exchange
 SPP-6687 - In routine operation, CCS shall support Field Force requests without the need of Field Force to have unambiguous or verbal communication with the signaller.	 SPP-17051 - Some links between the Stakeholder Requirement and CCS System Definition (field force)	 Issue
 SPP-6688 - In routine operation, CCS shall support the execution of requests without the need use ambiguous or verbal communication between other actors.		
 SPP-6819 - CCS shall allow the definition of specific application configuration(s) for supporting the supervision of operational production of all types of infrastructure needs and users	 SPP-24440 - CCS shall allow the definition of specific application configuration(s) for supporting the supervision of operational production of all types of infrastructure needs and users	 System Requirement
	 SPT2TRAFFIC-16567 - TrafficCS shall allow the definition of specific application configuration(s) for supporting the supervision of operational production of all types of infrastructure needs and users	 System Requirement










































Stakeholder Requirements	CCS-System	Type
 SPP-6820 - CCS shall support the onboard determination of track occupation - i.e. train position, length and integrity, including safety margins.	 SPMS-2192 - Sense+Observe motion of one train	 C2P-Function
 SPP-6821 - Dynamic track path determination	 SPP-24439 - Dynamic track path determination	 System Requirement
 SPP-6857 - CCS shall minimize the number of configuration parameters for Generic and Specific Applications	 SPP-24438 - CCS shall minimize the number of configuration parameters for Generic and Specific Applications	 System Requirement
	 SPT2TRAFFIC-16569 - TrafficCS shall minimize the number of configuration parameters for Generic and Specific Applications	 System Requirement
 SPP-6860 - CCS shall be based on standardized products and configurations	 SPP-24437 - CCS shall be based on standardized products and configurations	 System Requirement
	 SPT2TRAFFIC-16568 - TrafficCS shall be based on standardized products and configurations	 System Requirement
 SPP-6882 - CCS shall support advisory systems	 SPMS-2160 - Calculate information to support driving	 C2P-Function
	 SPP-17081 - Verify CCS System Definition to include	 Issue
	 SPP-17082 - Some links between the Stakeholder Requirement and CCS System Definition (degraded operation)	 Issue
 SPP-6931 - CCS shall allow a visual representation of the complete, consistent and accurate status of the operational situation	 SPMS-2108 - Sense+Observe point status	 C2P-Function
	 SPMS-2159 - Control usage restriction areas	 C2P-Function
	 SPMS-2160 - Calculate information to support driving	 C2P-Function
	 SPMS-2191 - Paused Observe level crossing protection status	 C2P-Function
	 SPMS-2192 - Sense+Observe motion of one train	 C2P-Function
	 SPMS-2215 - Usage restriction state	 C2P-Functional Exchange
	 SPMS-2216 - Usage restriction state	 C2P-Functional Exchange
 SPP-6934 - CCS shall be able to handle the specific capabilities and characteristics of the train units when executing train movements	 SPP-17075 - Unclear Stakeholder Requirements	 Issue
 SPP-6936 - CCS shall allow a visual representation malfunctioning devices and their impact on the operational situation	 SPP-17054 - Some links between the Stakeholder Requirement and CCS System Definition (diagnosis)	 Issue
 SPP-6938 - CCS shall implement functionalities that allow the use and combination of different types of sensor technologies and information	 SPP-24436 - CCS shall implement functionalities that allow the use and combination of different types of sensor technologies and information	 System Requirement















































Stakeholder Requirements	CCS-System	Type
 SPP-6940 - CCS shall deploy and use future sensor technology, based on defined Standard Interfaces) with no impact on the Traffic CS safety logic	 SPP-24435 - CCS shall deploy and use future sensor technology, based on defined Standard Interfaces) with no impact on the Traffic CS safety logic	 System Requirement
 SPP-6941 - CCS shall perform periodical self-tests and self-diagnostics of its vital functions	 SPP-17054 - Some links between the Stakeholder Requirement and CCS System Definition (diagnosis)	 Issue
 SPP-6947 - CCS shall allow movements from any point A to any point B without restrictions, if a route is available and is physically feasible.	 SPP-24434 - CCS shall allow movements from any point A to any point B without restrictions, if a route is available and is physically feasible.	 System Requirement
 SPP-6948 - Traffic CS shall support driving in relative braking distance, managed by trackside infrastructure.		
 SPP-6949 - CCS shall merge localisation information from train-side (e.g. position and speed) and trackside sources (e.g. track occupancy) into one safe representation as part of the operating state.	 SPMS-2192 - Sense+Observe motion of one train	 C2P-Function
	 SPP-17081 - Verify CCS System Definition to include	 Issue
 SPP-6950 - CCS shall support virtual coupling of trains, with train-to-train communication.	 SPP-17087 - Some links between the Stakeholder Requirement and CCS System Definition (virtual coupling)	 Issue
 SPP-6957 - CCS shall support the integration of complementary sensor information and data sources that enable the supervision of vehicles as well as trackside personnel and rail customers.	 SPP-24433 - CCS shall support the integration of complementary sensor information and data sources that enable the supervision of vehicles as well as trackside personnel and rail customers.	 System Requirement
 SPP-6960 - Field Force applications and CCS shall support a safe and performant track usage for trackbound (e.g. vehicles) and non-trackbound vehicle, and persons without creating a dangers for the traffic on the track.	 SPP-17051 - Some links between the Stakeholder Requirement and CCS System Definition (field force)	 Issue
 SPP-6991 - CCS shall support trains equipped with ETCS Baseline 3 (ETCS Level 2 only). This means CCS will implement ETCS System Version 2 on the trackside. The implemented ETCS System Versions can be raised over time	 SPP-24432 - CCS shall support trains equipped with ETCS Baseline 3 (ETCS Level 2 only). This means CCS will implement ETCS System Version 2 on the trackside. The implemented ETCS System Versions can be raised over time	 System Requirement
 SPP-7020 - CCS shall provide to Traffic Management System a complete, consistent and accurate status of the operational state.	 SPMS-2148 - Calculate operational traffic plan	 C2P-Function
	 SPMS-2159 - Control usage restriction areas	 C2P-Function
	 SPMS-2215 - Usage restriction state	 C2P-Functional Exchange
	 SPMS-2249 - Authorised distance and speed restriction	 C2P-Functional Exchange
	 SPMS-2300 - Estimated motion state	 C2P-Functional Exchange
	 SPMS-5329 - Observed point status	 C2P-Functional Exchange
	 SPMS-5452 - Observed level crossing state	 C2P-Functional Exchange
 SPP-7021 - CCS shall allow manoeuvres with cab-signalling (with no light signals) or using not-harmonised dwarf light signals.	 SPP-24431 - CCS shall allow manoeuvres with cab-signalling (with no light signals) or using harmonised dwarf light signals.	 System Requirement
 SPP-7025 - CCS shall be designed to use ETCS L2 without optical (light) signals.	 SPP-24430 - CCS shall be designed to use ETCS L2 without non-harmonised, optical signals.	


















































Stakeholder Requirements	CCS-System	Type
		 System Requirement
	 SPT2TRAFFIC-16566 - TrafficCS shall be designed to use ETCS L2 without non-harmonised, optical signals.	 System Requirement
 SPP-7053 - CCS shall support the dynamic automated determination of train characteristics	 SPP-17081 - Verify CCS System Definition to include	 Issue
 SPP-7054 - CCS shall autonomously supervise the routine procedures for the handing over of safety responsibility	 SPP-17051 - Some links between the Stakeholder Requirement and CCS System Definition (field force)	 Issue
	 SPP-17082 - Some links between the Stakeholder Requirement and CCS System Definition (degraded operation)	 Issue
 SPP-7068 - CCS shall in real time optimize the operational plans	 SPMS-2137 - Ensure safe movement of trains	 C2P-Function
	 SPMS-2148 - Calculate operational traffic plan	 C2P-Function
	 SPMS-2351 - Required operational traffic plan	 C2P-Functional Exchange
 SPP-7081 - CCS shall automatically supervise rail operation	 SPMS-2137 - Ensure safe movement of trains	 C2P-Function
	 SPP-17026 - Some links between the Stakeholder Requirement and CCS System Definition (shunting)	 Issue
 SPP-7082 - CCS shall minimize the impact of track work on railway operations and increase the safety for the field force	 SPP-17051 - Some links between the Stakeholder Requirement and CCS System Definition (field force)	 Issue
 SPP-7084 - CCS shall handle different system capabilities supporting standard manual controls	 SPP-17054 - Some links between the Stakeholder Requirement and CCS System Definition (diagnosis)	 Issue
 SPP-7098 - CCS shall achieve increased standards of reliability, precision and safety	 SPP-24429 - CCS shall achieve increased standards of reliability, precision and safety	 System Requirement
	 SPT2TRAFFIC-16565 - TrafficCS shall achieve increased standards of reliability, precision and safety	 System Requirement
 SPP-7111 - CCS shall optimize TCO through automation	 SPP-24428 - CCS shall optimize TCO through automation	 System Requirement
 SPP-7122 - Scalable, modular, multi-layered and standardised CCS architecture	 SPP-24427 - Scalable, modular, multi-layered and standardised CCS architecture	 System Requirement
	 SPT2TRAFFIC-16564 - Scalable, modular, multi-layered and standardised TrafficCS architecture	 System Requirement
 SPP-7130 - CCS shall support technical and operational interoperability	 SPP-24426 - CCS shall support technical and operational interoperability	 System Requirement
	 SPT2TRAFFIC-16563 - TrafficCS shall support technical and operational interoperability	 System Requirement


















































Stakeholder Requirements	CCS-System	Type
 SPP-7199 - CCS shall be flexible enabling an efficient and affordable migration	 SPP-24425 - CCS shall be flexible enabling an efficient and affordable migration	 System Requirement
 SPP-7548 - CCS shall provide a scalable and adaptable system architecture that is suitable for different contexts depending on the IM use cases.		
 SPP-7663 - Implementation of TSI	 SPP-24424 - Implementation of TSI	 System Requirement
	 SPT2TRAFFIC-16562 - Implementation of TSI	 System Requirement
 SPP-7668 - ATO GoA 3/4	 SPP-24423 - ATO GoA 3/4	 System Requirement
 SPP-8626 - CCS shall support diagnose test of a component during running time.	 SPP-17054 - Some links between the Stakeholder Requirement and CCS System Definition (diagnosis)	 Issue
 SPP-8810 - CCS shall base the information exchange to/from subsystem component on standard communication interfaces that shall be defined up to the physical layer.	 SPP-24422 - CCS shall base the information exchange to/from subsystem component on standard communication interfaces that shall be defined up to the physical layer.	 System Requirement
	 SPT2TRAFFIC-16561 - TrafficCS shall base the information exchange to/from subsystem component on standard communication interfaces that shall be defined up to the physical layer.	 System Requirement
 SPP-8839 - If driver is involved in the driving process, CCS shall support driving assistance recommendations	 SPMS-2160 - Calculate information to support driving	 C2P-Function
 SPP-8863 - CCS designed to reduce OPEX	 SPP-24421 - CCS designed to reduce OPEX	 System Requirement
	 SPT2TRAFFIC-16560 - TrafficCS designed to reduce OPEX	 System Requirement
 SPP-8864 - CCS able to handle different and changing system capabilities of its actors during operation	 SPP-17082 - Some links between the Stakeholder Requirement and CCS System Definition (degraded operation)	 Issue
 SPP-8865 - CCS shall reduce engineering complexity	 SPP-24420 - CCS shall reduce engineering complexity	 System Requirement
	 SPT2TRAFFIC-16559 - TrafficCS shall reduce engineering complexity	 System Requirement
 SPP-8866 - Implement standardised interfaces without hindering of innovation	 SPP-24419 - Implement standardised interfaces without hindering of innovation	 System Requirement
	 SPT2TRAFFIC-16558 - Implement standardised interfaces without hindering of innovation	 System Requirement
 SPP-8867 - Support Backward compatibility within the Target System architecture	 SPP-24418 - Support Backward compatibility within the Target System architecture	 System Requirement
	 SPT2TRAFFIC-16557 - Support Backward compatibility within the Target System architecture	

































Stakeholder Requirements	CCS-System	Type
		 System Requirement
 SPP-9266 - Management of variable System Capabilities	 SPP-17082 - Some links between the Stakeholder Requirement and CCS System Definition (degraded operation)	 Issue
	 SPP-24417 - Management of variable System Capabilities	 System Requirement
	 SPT2TRAFFIC-16556 - Management of variable System Capabilities	 System Requirement
 SPP-9270 - Support for mixed fleet operation	 SPP-24416 - Support for mixed fleet operation	 System Requirement
 SPP-9274 - Upgradeability of Internal Components	 SPP-24415 - Upgradeability of Internal Components	 System Requirement
	 SPT2TRAFFIC-16555 - Upgradeability of Internal Components	 System Requirement
 SPP-9296 - CCS shall enable updates of Configuration Data on runtime	 SPMS-2171 - Provide current time	 C2P-Function
	 SPMS-2182 - Maintain configuration data	 C2P-Function
	 SPP-17080 - Verify if functional exchange between maintain configuration and maintain railway infrastructure data and maintain CCS train data is missing	 Issue
 SPP-9297 - Reduction of engineering complexity	 SPP-24414 - Reduction of engineering complexity	 System Requirement
	 SPT2TRAFFIC-16554 - Reduction of engineering complexity	 System Requirement
 SPP-9298 - Minimum required Configuration Data implementation	 SPP-24413 - Minimum required Configuration Data implementation	 System Requirement
	 SPT2TRAFFIC-16553 - Minimum required Configuration Data implementation	 System Requirement
 SPP-9300 - Support for changing Operational Plans	 SPMS-2137 - Ensure safe movement of trains	 C2P-Function
	 SPMS-2148 - Calculate operational traffic plan	 C2P-Function
	 SPMS-2351 - Required operational traffic plan	 C2P-Functional Exchange
 SPP-9303 - Execution of Safety Supervision based on predefined procedures	 SPP-24412 - Execution of Safety Supervision based on predefined procedures	 System Requirement
	 SPT2TRAFFIC-16552 - Execution of Safety Supervision based on predefined procedures	

Stakeholder Requirements	CCS-System	Type
		 System Requirement
 SPP-9469 - CCS shall support scalable PRAMSS targets	 SPP-24411 - CCS shall support scalable PRAMSS targets	 System Requirement
	 SPT2TRAFFIC-16551 - TrafficCS shall support scalable PRAMSS targets	 System Requirement
 SPP-9496 - CCS shall be adaptable to local performance requirements by ensuring the scalability of its software components	 SPP-24410 - CCS shall be adaptable to local performance requirements by ensuring the scalability of its software components	 System Requirement
	 SPT2TRAFFIC-16550 - TrafficCS shall be adaptable to local performance requirements by ensuring the scalability of its software components	 System Requirement
 SPP-9513 - CCS shall be based on Generic Products that can be configured using openly available configuration parameters to address varying application needs	 SPP-24409 - CCS shall be based on Generic Products that can be configured using openly available configuration parameters to address varying application needs	 System Requirement
	 SPT2TRAFFIC-16549 - TrafficCS shall be based on Generic Products that can be configured using openly available configuration parameters to address varying application needs	 System Requirement
 SPP-9553 - CCS Hardware, Software and Engineering Data shall be independently upgradeable to minimize engineering efforts and reduce deployment time.	 SPP-24408 - CCS Hardware, Software and Engineering Data shall be independently upgradeable to minimize engineering efforts and reduce deployment time.	 System Requirement
	 SPT2TRAFFIC-16548 - TrafficCS Hardware, Software and Engineering Data shall be independently upgradeable to minimize engineering efforts and reduce deployment time.	 System Requirement
 SPP-9554 - CCS shall follow a generic safety approach in encapsulating safety relevant functions within building blocks with a separate safety approvals	 SPP-24407 - CCS shall follow a generic safety approach in encapsulating safety relevant functions within building blocks with a separate safety approvals	 System Requirement
	 SPT2TRAFFIC-16547 - TrafficCS shall follow a generic safety approach in encapsulating safety relevant functions within building blocks with a separate safety approvals	 System Requirement
 SPP-9555 - CCS shall ensure decoupled lifecycles for its components to simplify asset management	 SPP-24406 - CCS shall ensure decoupled lifecycles for its components to simplify asset management	 System Requirement
	 SPT2TRAFFIC-16546 - TrafficCS shall ensure decoupled lifecycles for its components to simplify asset management	 System Requirement
 SPP-9614 - CCS shall implement an architecture based on standardized interfaces to enable the integration of components from multiple suppliers	 SPP-24405 - CCS shall implement an architecture based on standardized interfaces to enable the integration of components from multiple suppliers	 System Requirement
	 SPT2TRAFFIC-16545 - TrafficCS shall implement an architecture based on standardized interfaces to enable the integration of components from multiple suppliers	 System Requirement
 SPP-9620 - CCS shall avoid as much as possible exported Safety-Related Application Conditions	 SPP-24404 - CCS shall avoid as much as possible exported Safety-Related Application Conditions	 System Requirement
	 SPT2TRAFFIC-16544 - TrafficCS shall avoid as much as possible exported Safety-Related Application Conditions	 System Requirement

Stakeholder Requirements	CCS-System	Type
 SPP-9644 - CCS shall acquire the static properties of the infrastructure (e.g. tracks with speed and gradient profiles) from a centralised service).	 SPMS-2182 - Maintain configuration data	 C2P-Function
 SPP-9645 - CCS shall acquire system configuration data from a centralised service via a standardised interface, based on EULYNX SMI-xx.	 SPP-24403 - CCS shall acquire system configuration data from a centralised service via a standardised interface, based on EULYNX SMI-xx.	 System Requirement
	 SPT2TRAFFIC-16543 - TrafficCS shall acquire system configuration data from a centralised service via a standardised interface, based on EULYNX SMI-xx.	 System Requirement
 SPP-9647 - CCS shall acquire the static properties of the trains (e.g. loading gauge) from a centralised service.	 SPMS-2182 - Maintain configuration data	 C2P-Function
 SPP-9660 - CCS shall disclose incompatibilities between its subsystems and their interfaces during runtime.	 SPP-17082 - Some links between the Stakeholder Requirement and CCS System Definition (degraded operation)	 Issue
 SPP-9679 - CCS shall implement standardised diagnostics functions and standardised interfaces for faster root cause analysis, recovery processes, failure prediction and prevention.	 SPP-17054 - Some links between the Stakeholder Requirement and CCS System Definition (diagnosis)	 Issue
 SPP-9680 - CCS shall provide diagnostic information based on the generic part of the EULYNX/EU-Rail System Pillar standardised diagnostic interface, called SDI-xx.	 SPP-17054 - Some links between the Stakeholder Requirement and CCS System Definition (diagnosis)	 Issue
	 SPP-24402 - CCS shall provide diagnostic information based on the generic part of the EULYNX/EU-Rail System Pillar standardised diagnostic interface, called SDI-xx.	 System Requirement
 SPP-9856 - Usage of FRMCS and GSM-R	 SPP-24401 - Usage of FRMCS and GSM-R	 System Requirement
 SPP-9870 - CCS shall follow modular design principles	 SPP-24400 - CCS shall follow modular design principles	 System Requirement
	 SPT2TRAFFIC-16542 - TrafficCS shall follow modular design principles	 System Requirement
 SPP-9894 - CCS shall implement an architecture based on standardised interfaces to facilitate independent safety cases and approval processes for each subsystem	 SPP-24399 - CCS shall implement an architecture based on standardised interfaces to facilitate independent safety cases and approval processes for each subsystem	 System Requirement
	 SPT2TRAFFIC-16541 - TrafficCS shall implement an architecture based on standardised interfaces to facilitate independent safety cases and approval processes for each subsystem	 System Requirement
 SPP-9899 - Stakeholder Requirement Test 1		
 SPP-9901 - CCS shall be designed in such a way that specified components can be replaced and interconnected without the need to re-approve other components	 SPP-24398 - CCS shall be designed in such a way that specified components can be replaced and interconnected without the need to re-approve other components	 System Requirement
	 SPT2TRAFFIC-16540 - TrafficCS shall be designed in such a way that specified components can be replaced and interconnected without the need to re-approve other components	 System Requirement
 SPP-9904 - CCS shall support the tool chain provided by centralised services e.g. regarding diagnostics, configuration management, topology update	 SPMS-2182 - Maintain configuration data	 C2P-Function
	 SPP-17054 - Some links between the Stakeholder Requirement and CCS System Definition (diagnosis)	 Issue

Stakeholder Requirements	CCS-System	Type
 SPP-9905 - CCS system shall be developed using a security-by-design process, in order to avoid attacks to hardware or software components	 SPP-17076 - Some links between the Stakeholder Requirement and CCS System Definition (security)	 Issue
 SPP-9906 - CCS system shall be protected by managing access in centralised access and identification Systems	 SPP-17076 - Some links between the Stakeholder Requirement and CCS System Definition (security)	 Issue
 SPP-9907 - CCS shall implement security according to the security-by-design process	 SPP-17076 - Some links between the Stakeholder Requirement and CCS System Definition (security)	 Issue
 SPP-9942 - Use standard hardware components	 SPP-24397 - Use standard hardware components	 System Requirement
	 SPT2TRAFFIC-16539 - Use standard hardware components	 System Requirement
 SPP-10109 - CCS shall support system deployment on centralised data centers.	 SPMS-2182 - Maintain configuration data	 C2P-Function
	 SPP-17054 - Some links between the Stakeholder Requirement and CCS System Definition (diagnosis)	 Issue
	 SPP-17076 - Some links between the Stakeholder Requirement and CCS System Definition (security)	 Issue
 SPP-10110 - CCS shall support the separation between the central system and decentralised lineside devices	 SPP-24396 - CCS shall support the separation between the central system and decentralised lineside devices	 System Requirement
 SPP-10174 - Decoupling of hardware and software components	 SPP-24395 - Decoupling of hardware and software components	 System Requirement
	 SPT2TRAFFIC-16538 - Decoupling of hardware and software components	 System Requirement
 SPP-10221 - Support for backward compatibility		
 SPP-10230 - Integration of external devices	 SPP-24394 - Integration of external devices	 System Requirement
	 SPT2TRAFFIC-16537 - Integration of external devices	 System Requirement
 SPP-10231 - Independence from pre-engineered safety critical logic	 SPP-24393 - Independence from pre-engineered safety critical logic	 System Requirement
	 SPT2TRAFFIC-16536 - Independence from pre-engineered safety critical logic	 System Requirement
 SPP-10232 - Automated triggering of mitigations		
 SPP-10233 - Supervision methodology	 SPP-17075 - Unclear Stakeholder Requirements	 Issue
 SPP-10234 - Compliance with safety-critical principles	 SPP-24391 - Compliance with safety-critical principles	 System Requirement
	 SPT2TRAFFIC-16535 - Compliance with safety-critical principles	 System Requirement

Stakeholder Requirements	CCS-System	Type
 SPP-10235 - Adherence to operational procedures	 SPP-24390 - Adherence to operational procedures	 System Requirement
	 SPT2TRAFFIC-16534 - Adherence to operational procedures	 System Requirement
 SPP-10245 - Upgradeability of adjacent systems	 SPP-24389 - Upgradeability of adjacent systems	 System Requirement
	 SPT2TRAFFIC-16533 - Upgradeability of adjacent systems	 System Requirement
 SPP-10246 - Integration of external devices	 SPP-24388 - Integration of external devices	 System Requirement
	 SPT2TRAFFIC-16532 - Integration of external devices	 System Requirement
 SPP-10253 - Allow configuration of Generic Application according to local needs within predefined limits	 SPP-24387 - Allow configuration of Generic Application according to local needs within predefined limits	 System Requirement
	 SPT2TRAFFIC-16531 - Allow configuration of Generic Application according to local needs within predefined limits	 System Requirement
 SPP-10254 - Enable implementation of Generic Products with Safety Cases independent of Configuration Data	 SPP-24386 - Enable implementation of Generic Products with Safety Cases independent of Configuration Data	 System Requirement
	 SPT2TRAFFIC-16530 - Enable implementation of Generic Products with Safety Cases independent of Configuration Data	 System Requirement
 SPP-10255 - Enable implementation of Generic Applications with Safety Cases independent of Configuration Data	 SPP-24385 - Enable implementation of Generic Applications with Safety Cases independent of Configuration Data	 System Requirement
	 SPT2TRAFFIC-16529 - Enable implementation of Generic Applications with Safety Cases independent of Configuration Data	 System Requirement
 SPP-10258 - Ensure fast response times	 SPP-17075 - Unclear Stakeholder Requirements	 Issue
 SPP-10259 - Timely reservation of track capacities	 SPP-17075 - Unclear Stakeholder Requirements	 Issue
 SPP-10260 - Prompt execution of requested plans	 SPP-17075 - Unclear Stakeholder Requirements	 Issue
 SPP-14106 - CCS shall interface to centralised security services	 SPP-17076 - Some links between the Stakeholder Requirement and CCS System Definition (security)	 Issue
 SPP-14117 - An harmonized process shall be defined to acquire data configuration related with train composition		
 SPP-14118 - An harmonized process shall be defined for automatic generation of data configuration using different technologies		
 SPP-14132 - CCS subsystems and their interfaces version compatibility	 SPP-24384 - CCS subsystems and their interfaces version compatibility	 System Requirement
 SPP-14133 - CCS system shall provide standardised interfaces	 SPP-24383 - CCS system shall provide standardised interfaces	

Stakeholder Requirements	CCS-System	Type
		 System Requirement
	 SPP-24401 - Usage of FRMCS and GSM-R	 System Requirement
	 SPP-24402 - CCS shall provide diagnostic information based on the generic part of the EULYNX/EU-Rail System Pillar standardised diagnostic interface, called SDI-xx.	 System Requirement
	 SPP-24403 - CCS shall acquire system configuration data from a centralised service via a standardised interface, based on EULYNX SMI-xx.	 System Requirement
	 SPP-24424 - Implementation of TSI	 System Requirement
	 SPT2TRAFFIC-16527 - TrafficCS system shall provide standardised interfaces	 System Requirement
	 SPT2TRAFFIC-16543 - TrafficCS shall acquire system configuration data from a centralised service via a standardised interface, based on EULYNX SMI-xx.	 System Requirement
	 SPT2TRAFFIC-16562 - Implementation of TSI	 System Requirement
 SPP-14326 - CCS shall use reference models, reference laboratories and automated compliance testing in accordance with the European approval procedure (CENELEC phases 6 to 9)	 SPP-24382 - CCS shall use reference models, reference laboratories and automated compliance testing in accordance with the European approval procedure (CENELEC phases 6 to 9)	 System Requirement
	 SPT2TRAFFIC-16528 - TrafficCS shall use reference models, reference laboratories and automated compliance testing in accordance with the European approval procedure (CENELEC phases 6 to 9)	 System Requirement
 SPP-15529 - CCS shall support carrying out maintenance activities under production without blocking a track	 SPP-17051 - Some links between the Stakeholder Requirement and CCS System Definition (field force)	 Issue
 SPP-15837 - Level of backward compatibility for Traffic CS		
 SPP-28337 - Standardised interfaces (FFFIS, FIS) to decouple life cycles and safety cases		
 SPP-28338 - Provide a scalable and adaptable system architecture which is suitable for different contexts		
 SPP-28346 - Implement interface designs that enable the determination of smallest common set of shareable functions		
 SPP-28347 - Handling of train and shunting movements in Traffic CS		
 SPP-28351 - EULYNX Standard Communication Interfaces SCI-xx		
 SPP-28352 - Enable the system integration of legacy systems		
 SPP-28353 - As a Supplier, I want a Traffic CS system implementing an architecture based on standardized interfaces		
 SPP-28354 - Able to provide a standard interface to manage handover of trains between SERA equipped areas		