



Notified National Technical Rules (NNTRs)

ID:	CH-CSM-RA-001	State:	Switzerland	Version:	1.0	Status:	June 2019
Title:	Proof of safety concept for acquiring ETCS authorisation in Switzerland						
Office responsible:	Federal Office of Transport FOT Approvals and Rules Section				Address:	3003 Bern Switzerland	
E-mail:	_BAV-WeiterentwicklungRegelwerke@bav.admin.ch						
Referenced TSI or CSM article:	CCS TSI, Clause 3.2.1 CSM-RA, Annex I, Section 1.1.1						
Reference in Swiss regulation:	IP-RailO IP 38.3, Section 1.1 IP-RailO IP 47.1, Section 3.2						
Current NNTR classification:	<input type="checkbox"/> NNTR on an 'open point' in the CSM <input type="checkbox"/> NNTR due to difference between Swiss regulation and corresponding requirements in the CSM <input checked="" type="checkbox"/> NNTR due to additional requirements in Swiss regulation without equivalent in the CSM						
Full description:	Title:	Proof of safety concept for acquiring ETCS authorisation in Switzerland					
	Type of requirement	Safety	Reliability/availability	Health	Environment	Technical compatibility	
		X	X	-	-	X	
	Scope of application	ETCS-L2 and L1LS lines and vehicles in Switzerland					
	Requirement	The compliance and proof of safety described in the document 'SiNa Konzept Version 2.02' (ETCS system manager baseline configuration) must be provided in order to acquire ETCS authorisation for vehicles and infrastructure. As a minimum, the tests defined in the document 'Master Testkonzept' Version 1.6 (ETCS system manager baseline configuration) must be conducted and have a positive outcome.					
	Reasons/explanation	A proof of safety concept ensures safe, interoperable and reliable transport with ETCS. The 'master test concept' establishes test areas in which the requirements must be met in order to achieve a demonstrably functional, interoperable and integrated ETCS system throughout Switzerland. The 'master test concept' also establishes who is responsible for the various areas of testing. In the case of concrete projects, it is recommended to provide the Swiss ETCS system manager with any new information.					
	Applicable to	RU	Vehicle owner	IM	IU		
X		X	X	X			
Validity period	unlimited						
Current applicable norms in Switzerland:							
Test specification for certificate of conformity:							

Notified National Technical Rules (NNTRs)

ID:	CH-CSM-RA-002	State:	Switzerland	Version:	1.0	Status:	June 2019
Title:	Requirements at speeds greater than 200 km/h						
Office responsible:	Federal Office of Transport FOT Approvals and Rules Section			Address:	3003 Bern Switzerland		
E-mail:	_BAV-WeiterentwicklungRegelwerke@bav.admin.ch						
Referenced TSI or CSM article:	CCS TSI, Clause 3.2.1 CSM-RA, Annex I, Section 1.1.1						
Reference in Swiss regulation:	IP-RailO IP 38.3, Section 1.1 IP-RailO IP 47.1, Section 3.2						
Current NNTR classification:	<input type="checkbox"/> NNTR on an 'open point' in the CSM <input type="checkbox"/> NNTR due to difference between Swiss regulation and corresponding requirements in the CSM <input checked="" type="checkbox"/> NNTR due to additional requirements in Swiss regulation without equivalent in the CSM						
Full description:	Title:	Requirements at speeds greater than 200 km/h					
	Type of requirement	Safety	Reliability/availability	Health	Environment	Technical compatibility	
		X	X	-	-	-	
	Scope of application	ETCS-L2 vehicles in Switzerland					
	Requirement	<p>For the use of vehicles at speeds exceeding 200 km/h, proof of compliance with Gamma brake model (at least in accordance with EU Commission Decision 2015/14) must be demonstrated.</p> <p>For vehicles which can technically reach speeds above 200 km/h (e.g. because entering this maximum speed is not prevented by technical means), but which are not permitted for use at this maximum speed in Switzerland, the measures to prevent journeys at a higher speed than that permitted in Switzerland shall be addressed and assessed in the safety certificate. Any residual risk must be acceptable.</p>					
	Reasons/explanation	It must be assumed that the basic control locking device will be transmitted up to 250 km/h. The maximum permitted vehicle speed in Switzerland may nonetheless not be exceeded.					
	Applicable to	RU	Vehicle owner	IM	IU		
		X	X	-	-		
Validity period	unlimited						
Current applicable norms in Switzerland:							
Test specification for certificate of conformity:							

Notified National Technical Rules (NNTRs)

ID:	CH-CSM-RA-003	State:	Switzerland	Version:	1.0	Status:	June 2019
Title:	Quality of train data						
Office responsible:	Federal Office of Transport FOT Approvals and Rules Section				Address:	3003 Bern Switzerland	
E-mail:	_BAV-WeiterentwicklungRegelwerke@bav.admin.ch						
Referenced TSI or CSM article:	CCS TSI, Clause 3.2.1 CSM-RA, Annex I, Section 1.1.1						
Reference in Swiss regulation:	IP-RailO IP 38.3, Section 1.1 IP-RailO IP 47.1, Section 3.2						
Current NNTR classification:	<input type="checkbox"/> NNTR on an 'open point' in the CSM <input type="checkbox"/> NNTR due to difference between Swiss regulation and corresponding requirements in the CSM <input checked="" type="checkbox"/> NNTR due to additional requirements in Swiss regulation without equivalent in the CSM						
Full description:	Title:	Quality of train data					
	Type of requirement	Safety	Reliability/availability	Health	Environment	Technical compatibility	
		X	X	-	-	-	
	Scope of application	ETCS vehicles in Switzerland					
	Requirement	The processes for transmitting and entering train data shall be designed in such a way that no more than 1 in 1,000 trains has incorrect data.					
	Reasons/explanation	<p>The assumptions of the risk analyses carried out to achieve the safety objectives are based on these values. Data in this sense are brake percentages, v_{max}, train length etc..</p> <p>A value is considered incorrect if it deviates by 20 per cent or more from the actual value.</p>					
	Applicable to	RU	Vehicle owner	IM	IU		
X		-	-	-			
Validity period	unlimited						
Current applicable norms in Switzerland:							
Test specification for certificate of conformity:							