

## Notified National Technical Rules (NNTRs)

<b>ID:</b>	<b>CH-TSI CCS-005</b>	<b>State:</b>	Switzerland	<b>Version:</b>	2.0	<b>Status:</b>	June 2019
<b>Title:</b>	<b>Proof of Quality of Service for GSM-R radio transmission</b>						
<b>Office responsible:</b>	Federal Office of Transport FOT Approvals and Rules Section			<b>Address:</b>	3003 Bern Switzerland		
<b>E-mail:</b>	_BAV-WeiterentwicklungRegelwerke@bav.admin.ch						
<b>Referenced TSI article:</b>	No corresponding requirements in CCS TSI. Basic parameter (2015/2299/EU), Clause 12.1.2.2						
<b>Reference in Swiss regulation:</b>	IP-RailO IP 38.3, Section 1.1 IP-RailO IP 47.1, Section 3.2						
<b>Current NNTR classification:</b>	<input type="checkbox"/> NNTR on an 'open point' in the TSI <input type="checkbox"/> NNTR due to difference between Swiss regulation and corresponding requirements in the TSI <input checked="" type="checkbox"/> NNTR due to additional requirements in Swiss regulation without equivalent in the TSI						
<b>Full description:</b>	<b>Title</b>	GSM-R Proof of Quality of Service for GSM-R radio transmission					
	<b>Type of requirement</b>	Safety	Reliability/availability	Health	Environment	Technical compatibility	
		-	X	-	-	X	
	<b>Scope of application</b>	ERTMS/ETCS on-board unit					
	<b>Requirement</b>	<p>The ETCS data channel must meet the QoS parameters in SUBSET-093 V2.3.0 "GSM-R Interfaces Class 1 Requirements".</p> <p>Version 3.0 is to be used for document O-2475 "ERTMS/GSM-R Quality of Service Test Specification" referenced in SUBSET-093. As proof of compliance, test results obtained with a GSM-R network in operation in Europe or in a laboratory which reproduces such a network are required.</p>					
	<b>Reasons/ explanation</b>	Compliance with required QoS parameters for GSM-R (EDOR) in order to ensure reliable operation on ETCS L2 track.					
	<b>Applicable to SRS version</b>	2.2.2 +	2.3.0d	3.4.0	3.6.0		
		X	X	X	X		
<b>Validity period</b>	unlimited						
<b>Current applicable norms in Switzerland:</b>							
<b>Test specification for certificate of conformity:</b>							