

## ANNEX 1

Country	Main Operator	Gauge	ATP	Electrification	Total KM	% Electrified	Comments
Albania	HSH - Hekurudhe e Shqiperise	1435		no			12km narrow gauge (950mm), not electrified
Austria	ÖBB - Österreichische Bundesbahnen	1435	Indusi / LZB	15kV 16.2/3Hz	5.624	58%	15km narrow gauge (1000mm) not electrified / 364km narrow gauge (760mm) with 91km electrified at 6.6kV 25Hz
Belarus	BCZ - Bielorusse Zeleznue Dorogi	1524		3000V			
Belgium	NMBS - Nationale Maatschappij der Belgische Spoorwegen (Dutch) or SNCB - Société Nationale des Chemins de fer Belges (French)	1435	TBL	3000V	3.568	63%	
Bosnia and Herzegovina	ZBH - Zeleznica Bosnia-Herzegovina	1435		25kV 50Hz			
Bulgaria	BDZ - Bulgarski Durzhavni Zhelezniitsi	1435		25kV 50Hz	4.049	65%	245km narrow gauge (760mm), not electrified
Croatia	HZ - Hrvatske Zeljeznice	1435		25kV 50Hz / 3000V	2.699	36%	
Czech Republic	CD - Ceske Drahy	1435		1500V	9.451	1%	
Denmark	DSB - Danske Statsbaner	1435	ZUB 123	25kV 50Hz	2.344	26%	some tracks with 1500V DC
Estonia	EVR - Eesti Vabariigi Raudtee	1524		3000V			
Finland	VR - Valtionrautatiet	1524	EBICAB 900	25kV 50Hz	5.846	28%	
France	SNCF - Société Nationale des Chemins de fer Français	1435	TVM / KVB / Crocodile	25kV 50Hz / 1500V	34.449	39%	198km narrow gauge, electrified at 600 / 750 / 850 V DC (mostly 3rd rail)
Germany	DB(AG) - Deutsche Bahn AG	1435	Indusi / LZB / Euroloop	15kV 16.2/3Hz	40.793	37%	some tracks with 25kV 50Hz AC, 500 V DC and 800 / 1200V DC
Greece	OSE - Organismos Sidirodromon Ellados	1435		25kV 50Hz	1.565	5%	892km narrow gauge (1000mm), not electrified / 22km narrow gauge (750mm), not electrified
Hungary	MÁV - Magyar Államvasutak	1435	EVM	25kV 50Hz	7.403	28%	35km broad gauge (1524mm), electrified at 3000V DC / 176km narrow gauge, not electrified
Ireland	IE - Iarnród Éireann/Irish Rail and NIR - Northern Ireland Railways	1600		no, except the DART line	3.138	1%	
Italy	FS - Ferrovie dello Stato	1435	BACC / RSDD	3000V	15.982	57%	71km narrow gauge (950mm), not electrified
Latvia	LVD - Ladvijas Dzelzceļš	1524		3000V			
Lithuania	LG - Valstybine Imone Lietuvos Gelezinkeliai	1524		3000V			
Luxembourg	CFL - Société Nationale des Chemins de Fer Luxembourgeois	1435		25kV 50Hz	271	81%	
Macedonia	MZ - Makedonski Zeleznici	1435		25kV 50Hz			
Moldova	CFM - Căile Ferate Moldova	1524		3000V			
Netherlands	NS - Nederlandse Spoorwegen	1435	ATB / ATB-NG	1500V	2.765	72%	
Norway	NSB - Norges Statsbaner	1435		15kV 16.2/3Hz	4.044	60%	

Country	Main Operator	Gauge	ATP	Electrification	Total KM	% Electrified	Comments
Poland	PKP - Polskie Koleje Panstwowe	1435	KHP	3000V	23.249	49%	
Portugal	CP - Caminhos de Ferro Portugueses	1668	EBICAB 700	25kV 50Hz	2.586	17%	26km at 1500V DC / 368km narrow gauge (1000mm), not electrified
Romania	CFR - Caile Ferate Romane	1435		25kV 50Hz	10.000	24%	
Russia	RZD - Rossiyskie Zeleznue Dorogi	1524		25kV 50Hz / 3000V			
Serbia	JZ - Zajednica Jugoslovenskih Zeleznica	1435		25kV 50Hz	4.703	30%	
Slovakia	ZSR - Zeleznice Slovenskej Republiky	1435		25kV 50Hz / 3000V	3.660	36%	101km broad gauge (1524mm), all electrified at 3000V DC
Slovenia	SZ - Slovenske Zeleznice	1435		3000V	1.288	40%	
Spain	RENFE - Red Nacional de los Ferrocarriles Españoles	1668	ASFA / LZB	3000V	12.560	51%	921km standard gauge electrified at 25kV 50Hz (AVE line)
Sweden	SJ - Statens Järnvägar	1435	EBICAB 700 / ATC2 / L10000	15kV 16.2/3Hz	9.972	70%	
Switzerland	SBB - Schweizerische Bundesbahnen (German), CFF - Chemins de Fer Fédéraux Suisses (French) or FFS - Ferrovie Federali Svizzere (Italian)	1435	ZUB 121	15kV 16.2/3Hz			some tracks with 1500V DC
Turkey	TCDD - Türkiye Cumhuriyeti Devlet Demiryollari Isletmesi	1435	ATS / CTC	25kV 50Hz			
Ukraine	UZ - Ukrainska Zalznitsa	1524		3000V			
United Kingdom	BR - British Rail	1435		25kV 50Hz / 750V (3rd rail)	31.932	14%	