



Annex to the

Rail Freight Corridor Orient/East-Med

Investment Plan

6.1 RFC Orient/East-Med Project List

RFC Orient/East-Med Project List

Status	Member state	IM	Line	Section		Category	Project name	Specification	Note	Start		End		Reached parameters									
				From	To					Month	Year	Month	Year	Estimated Financial Requirments [mil. Of EUR]	Financial Sources	Maximum speed [km*h ⁻¹]	Axle load [t] / Line category	Maximum Train Lenght [m]	Traction power	ETCS Level	Track clearan ce	Interm. Code	
ongoing	Germany	DB NETZ	Oldenburg - Wilhelmshaven	Oldenburg	Wilhelmshaven	Principal line	ABS Oldenburg - Wilhelmshaven	Electrification	Elimination bottleneck	3	2003	12	2022	818,00	BVWP	120	22,5	740	AC 15 kV - 16,7 Hz			P/C 410 (P/C 80)	
ongoing	Germany	DB NETZ	Uelzen - Stendal	Uelzen	Stendal	Principal line	ABS Uelzen - Stendal	Other	completion of double track-line	11	2013	12	2025	272,00	BVWP	160	22,5	740	AC 15 kV - 16,7 Hz			P/C 410 (P/C 80)	
ongoing	Germany	DB NETZ	Berlin - Dresden	Berlin	Dresden	Principal line	ABS Berlin - Dresden	Other	speed increase 200 km/h	11	2001	12	2018	802,00	BVWP	200	22,5	740	AC 15 kV - 16,7 Hz			P/C 410 (P/C 80)	
Completed	Czech Republic	SŽDC	Praha - Kolín	Běchovice	Úvaly	Principal line	Modernizace traťového úseku Praha Běchovice - Úvaly	Reconstruction, modernization of the track		10	2013	5	2016			160	22,5	650	3KV DC	ETCSL2	GC	80/410	
Completed	Czech Republic	SŽDC	Praha - Kolín	Praha	Kolín	Principal line	Úpravy zab. zař. pro ETCS v úseku Praha - Kolín	ETCS Implementation		2	2014	6	2016			160	22,5	650	3KV DC	ETCSL2	Z-GČD	80/410	
Completed	Czech Republic	SŽDC	Kolín - Havlíčkův Brod - Brno	Kolín	Brno	Diversionary line	GSM-R Kolín - Havlíčkův Brod - Křižanov - Brno	GSM-R implementation		3	2014	6	2016			Only GSMR implementation	Only GSMR implementation	Only GSMR implementation	Only GSMR implementation	Only GSMR implementation	Only GSMR implementation	Only GSMR implementation	
Completed	Czech Republic	SŽDC	Havlíčkův Brod - Brno	Sklené nad Oslavou	Ostriv nad Oslavou	Diversionary line	Rekonstrukce kolej č. 1 a 2 Sklené nad Oslavou – Ostrov nad Oslavou	Reconstruction, modernization of the track		7	2014	9	2015			140	22,5	650	3KV DC		GC	57/382	
Completed	Czech Republic	SŽDC	Břeclav - Wien			Principal line	Rekonstrukce mostu v km 80,930 trati Hohenau (ÖBB) - Přerov	Bridge renewal		2	2015	8	2016			160	22,5	650	25 KV AC		Z-GC	80/410	
Completed	Czech Republic	SŽDC	Pardubice - Česká Třebová	Ústí nad Orlicí	Ústí nad Orlicí	Principal line	Průjezd železničním uzlem Ústí nad Orlicí	Reconstruction, modernization of the track		12	2012	5	2015			120	22,5	650	3KV DC	ETCSL2	GC	80/410	
Completed	Czech Republic	SŽDC	Břeclav - Lanžhot	Břeclav	Břeclav	Principal line	Rekonstrukce železničního uzlu Břeclav, 2. stavba	Reconstruction, modernization of the track		12	2012	3	2015			130	22,5	650	25 KV AC	ETCSL2	Z-GC	80/410	
Completed	Czech Republic	SŽDC	Brno - Břeclav	n.a.	n.a.	Principal line	DOZ Břeclav - Brno	Modernization of the rail traffic management system		3	2014	10	2015			Only traffic management system	Only traffic management system	Only traffic management system	Only traffic management system	Only traffic management system	Only traffic management system	Only traffic management system	
Completed	Czech Republic	SŽDC	Havlíčkův Brod - Brno	Brno-Maloměřice	Brno-Královo Pole	Diversionary line	Rekonstrukce koleje č. 2 Brno-Maloměřice - Brno-Královo Pole	Reconstruction, modernization of the track		5	2015	1	2016			80	22,5	650	25 KV AC		Z-GČD	57/381	
Completed	Czech Republic	SŽDC	Havlíčkův Brod - Brno	Brno-Královo Pole	Kuřim	Diversionary line	Rekonstrukce koleje č. 2 Brno-Královo Pole - Kuřim	Reconstruction, modernization of the track		4	2015	1	2016			120	22,5	650	25 KV AC		Z-GČD	57/381	
Completed	Czech Republic	SŽDC	Brno - Břeclav	Brno Maloměřice (incl.)	Brno Židenice (excl.)	Principal line	Modernizace traťového úseku Brno Maloměřice (včetně) - Brno Židenice (mimo)	Reconstruction, modernization of the track		2	2015	12	2015			80	22,5	650	25 KV AC		Z-GČD	80/410	
Completed	Czech Republic	SŽDC	Brno - Břeclav	Modřice (excl.)	Brno Horní Heršpice (excl.)	Principal line	Modernizace traťového úseku Modřice (mimo) - Brno Horní Heršpice (mimo)	Reconstruction, modernization of the track		2	2015	4	2015			120	22,5	650	25 KV AC		Z-GČD	80/410	
Completed	Czech Republic	SŽDC	Praha - Kolín	Praha-Bubeneč	Praha-Holešovice	Principal line	Optimalizace tratě Praha Bubeneč - Praha Holešovice	Reconstruction, modernization		11	2012	10	2015			80	22,5	650	25 KV AC		Z-GČD	80/410	

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				From	To					Month	Year	Month	Year	Estimated Financial Requirments [mil. Of EUR]	Financial Sources	Maximum speed [km*h ⁻¹]	Axle load [t] / Line category	Maximum Train Lenght [m]	Traction power	ETCS Level	Track clearance	Interm. Code
								of the track														
planned	Czech Republic	SŽDC	Praha Node	Praha	Praha	Diversionary line	Optimization of the line Praha Hostivar - Praha hl.n., 2nd part - Praha Hostivar - Praha hl.n.	Reconstruction, modernization of the track	The scope of the project is reconstruction of substructure, superstructure, bridges, platforms and catenary, as well as relocation of infrastructure networks. The Action will generate positive effects in terms of increased capacity and improved safety and reliability of the line. It will also contribute to increased capacity of the current major bottleneck on the rail Core Network.	7/2017		10/2020		134,30	State Budget/CEF	80 - 120	D3	650	3KV DC		Z-GC	80/410
planned	Czech Republic	SŽDC	State Border (DE) - Praha - Kolín	Děčín	Kolín	Principal line	ETCS on 1st rail transit corridor: State Border (DE) - Dolní Zleb - Praha-Libeň – Kolín	Reconstruction, modernization of the track	The scope of the project is an ECTS level 2 implementation.	03/2017		8/2020		25	State Budget	Only ETCS implementation	Only ETCS implementation	Only ETCS implementation	Only ETCS implementation	ETCS L2	Only ETCS implementation	Only ETCS implementation
planned	Czech Republic	SŽDC	Praha Node	Praha-Libeň	Praha-Hostivař / Praha-Vršovice	Diversionary line	Increasing capacity of the Freight line Praha-Libeň – Praha-Malešice – Praha-Hostivař / Praha-Vršovice (Praha Freight Bypass)	Reconstruction, modernization of the track	The objective of the project is an increase of the capacity of the track section Praha-Libeň - Praha-Malešice and reconstruction of flyover crossing on the eastern railway station head in Praha-Liben.	12/2021		12/2023		47,91	State Budget	To be defined	To be defined	To be defined	To be defined	To be defined	To be defined	To be defined
planned	Czech Republic	SŽDC	Praha - Brno	Nymburk	Nymburk	Principal line	Modernization of railway st. Nymburk hl. n.	Reconstruction, modernization of the track	Modernization of important railway node for freight transport, reconstruction of the railway station building, expand of the customer services and possible linking of the passenger train station to the bus terminal.	01/2021		01/2023		75	OPT II	To be defined	To be defined	To be defined	To be defined	To be defined	To be defined	To be defined
planned	Czech Republic	SŽDC	Brno	Brno	Brno	Principal line	Railway junction Brno (Study) (also: Brno Rail Node)	Reconstruction, modernization of the track	New railway junction Brno and new station. The objective is a significant increase of capacity in Railway junction Brno.	5/2015		2/2024		11,00	State Budget	To be defined	To be defined	To be defined	To be defined	To be defined	To be defined	To be defined

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																			Month	Year	Month	Year
planned	Czech Republic	SŽDC	Brno	Brno	Brno	Principal line	Railway junction Brno (Works) (also: Brno Rail Node)	Reconstructio n, modernization of the track	The project's measures include construction of new railway junction Brno and new station. The objective of the project is a significant increase of capacity in Railway junction Brno.	1/2025		2/2030		745,00	To be defined	To be defined	To be defined	To be defined	To be defined	To be defined	To be defined	To be defined
planned	Czech Republic	SŽDC	Pardubice - Ceska Trebova	Ústí nad Orlicí	Choceň	Principal line	Modernization of the line Usti nad Orlici - Chocen	Reconstructio n, modernization of the track	The aim of the project is to modernize the railway section Usti nad Orlici - Chocen, increase the line speed, increase safety, ensure reliable operation, mitigate irregularities in traffic, increase capacity and enhance the quality of overall railway infrastructure.	1/2019		12/2020		241,00	State Budget	To be defined	To be defined	To be defined	To be defined	To be defined	To be defined	To be defined
planned	Czech Republic	SŽDC	Ceska Trebova	Česká Třebová	Česká Třebová	Principal line	Passage through the railway junction Ceska Trebova	Reconstructio n, modernization of the track	Main objective of the project is modernization of the junction Ceska Trebova, increase of the speed, reconstruction of the passenger platform, improvement of the technical parameters for freight transport, decrease of impact of rail transport on environment and increase of safety of passengers.	1/2019		12/2020		219,00	State Budget	To be defined	To be defined	To be defined	To be defined	To be defined	To be defined	To be defined
planned	Czech Republic	SŽDC	Pardubice	Pardubice	Pardubice	Principal line	Passage through the railway junction Pardubice (works)	Reconstructio n, modernization of the track	The project's scope is a complete reconstruction of platforms, underpasses, information system security equipment and overhead lines and increase of the speed in railway junction Pardubice.	1/2019		12/2020		138,00	State Budget	To be defined	To be defined	To be defined	To be defined	To be defined	To be defined	To be defined

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planned	Czech Republic	SŽDC	Decin - Kolin	Děčín	Kolín	Principal line	Optimization of the line Decin - Vsetaty - Lysa nad Labem - Kolin	Reconstruction, modernization of the track	The project concerns an optimization of the line Decin - Vsetaty - Lysa nad Labem - Kolin in order to achieve an increase of safety, capacity and speed.	1/2019		2/2026		36,11	State Budget	To be defined	To be defined	To be defined	To be defined	To be defined	To be defined	To be defined
planned	Czech Republic	SŽDC	Prerov - Ceska Trebova	Česká Třebová	Přerov	Principal line	ETCS on railway line Ceska Trebova - Prerov	Reconstruction, modernization of the track	The main objective of the project is ETCS implementation on railway line Ceska Trebova - Prerov and interoperability implementation. The objective is an increased efficiency of rail transport management and in particular a significant increase in its safety.	05/2017		11/2019		14,0	State Budget	Only ETCS implemtation	Only ETCS implemtation	Only ETCS implemtation	Only ETCS implemtation	ETCS L2	Only ETCS implemtation	Only ETCS implemtation
planned	Czech Republic	SŽDC	Praha Node	Praha-Vysočany	Lysá nad labem	Diversionary line	Optimization of the line Praha Vysocany- Lysa nad Labem, 2nd construction phase (Praha Freight Bypass)	Reconstruction, modernization of the track	The project's scope is a reconstruction of the line in order to meet the standard conditions, to ensure reliable operation with the necessary capacity and remove obsolete equipment.	02/2017		12/2022		289,81	State Budget	85 - 100	22,5	600	3kV DC		Z-GC	80/410
Completed	Slovakia	ŽSR	Bratislava - Nové Zámky	Senec	Sládkovičovo	Principal line	Oprava priecestia km 95,617 Senec - Sládkovičovo	Reconstruction of the railway crossing		9	2016	9	2016			140	D4	700	25kV AC		GB	70/400
Completed	Slovakia	ŽSR	Nové Zámky - Štúrovo	Pribeta	Pribeta	Principal line	Rušenie výhybiek 8A, 10A Pribeta	Repeal of the switches Nr 8A and 10A		9	2015	10	2015			120	D4	700	25kV AC		GB	70/400
Completed	Slovakia	ŽSR	Bratislava - Nové Zámky	Galanta	Sládkovičovo	Principal line	Oprava priecestia km 97,198 Galanta - Sládkovičovo	Reconstruction of the railway crossing km 97,198		4	2016	4	2016			120	D4	700	25kV AC		GB	70/400
Completed	Slovakia	ŽSR	Nové Zámky - Komárno	Bajč	Bajč	Principal line	Komplexná rekonštrukcia výhybiek č. 4,5,6 Bajč	Reconstruction of the switches Nr 4,5,6		4	2016	4	2016			100	D4	620	25kV AC		GB	70/400
Completed	Slovakia	ŽSR	Bratislava - Nové Zámky	Senec	Sládkovičovo	Principal line	Oprava priecestia km 84,850 Senec - Sládkovičovo	Reconstruction of the railway crossing		4	2016	4	2016			140	D4	700	25kV AC		GB	70/400
Completed	Slovakia	ŽSR	Bratislava - Nové Zámky	Šaľa	Trnovec nad Váhom	Principal line	Oprava priecestia km 114,666 Šaľa - Trnovec nad Váhom	Reconstruction of the railway crossing		4	2016	4	2016			120	D4	700	25kV AC		GB	70/400

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Completed	Slovakia	ŽSR	Nové Zámky - Štúrovo	Štúrovo	Mužľa	Principal line	oprava koľajového lôžka koľaje na priecestí km 184,323 Štúrovo - Mužľa	Reconstructio n of railway bed of the track on crossing km 184,323		5	2016	5	2016			120	D4	700	25kV AC		GB	70/400
Completed	Slovakia	ŽSR	Bratislava - Nové Zámky	Šaľa	Trnovec nad Váhom	Principal line	Oprava priecestia km 119,251 Šaľa - Trnovec nad Váhom	Reconstructio n of the railway crossing	asphalting	6	2016	6	2016			120	D4	700	25kV AC		GB	70/400
Completed	Slovakia	ŽSR	Kúty - Bratislava	Malacky	Malacky	Principal line	oprava koľajového lôžka výhybiek na koľaji č. 1 v žst Malacky	Reconstructio n of railway bed of the switches on the track Nr 1 of the station Malacky		11	2015	12	2015			140	D3	700	25kV AC		GB	70/400
Completed	Slovakia	ŽSR	Bratislava - Trnava	Bratislava hl.st.	Bratislava Vinohrady	Diversionary line	oprava koľajového lôžka koľaje Bratislava hl. st. - Bratislava Vinohrady koľ. č. 2	Reconstructio n of railway bed of the track Nr. 2 Bratislava main station - Bratislava Vinohrady		4	2015	4	2015			120	D4	700	25kV AC		GB	70/400
Completed	Slovakia	ŽSR	Bratislava - Nové Zámky	Bratislava Vajnory	Bernoláko vo	Principal line	Oprava priecestia km 70,746 Bratislava Vajnory - Bernolákovo	Reconstructio n of the railway crossing km 70,746		9	2015	9	2015			120	D4	700	25kV AC		GB	70/400
Completed	Slovakia	ŽSR	Kúty - Bratislava	Malacky	Malacky	Principal line	oprava koľajového lôžka výhybiek č. 19,20,21,24 v žst Malacky	Reconstructio n of railway bed of the switches Nr 19,20,21,24 of the station Malacky		11	2015	12	2015			140	D3	700	25kV AC		GB	70/400
Completed	Slovakia	ŽSR	Bratislava - Rajka	Bratislava Petržalka	Bratislava Petržalka	Principal line	oprava koľajového lôžka koľaje Bratislava Petržalka - Bratislava UNS koľ. č. 1	Reconstructio n of railway bed of the track Nr. 1 Bratislava Petržalka - Bratislava UNS		3	2016	3	2016			80	D4	690	25kV AC		GB	70/400
Completed	Slovakia	ŽSR	Bratislava - Rajka	Bratislava Petržalka	Bratislava Petržalka	Principal line	oprava koľajového lôžka koľaje Rusovce - Bratislava Petržalka	Reconstructio n of railway bed on the track Rusovce - Bratislava Petržalka		4	2016	4	2016			80	D3	690	25kV AC		GB	70/400
Completed	Slovakia	ŽSR	Bratislava - Rajka	Bratislava Nové Mesto	Bratislava UNS	Principal line	oprava koľajového lôžka koľaje koľ. č. 2 Bratislava Nové Mesto -Bratislava UNS	Reconstructio n of railway bed on the track Nr 2 Bratislava Nove Mesto - Bratislava UNS		3	2016	3	2016			80	D4	690	25kV AC		GB	70/400
Completed	Slovakia	ŽSR	Bratislava - Nové Zámky	Bratislava hl.st.	Odb Močiar	Principal line	oprava koľajového lôžka koľaje koľ. č. 1 Bratislava hl. st. -Odb Močiar	Reconstructio n of railway bed on the track Nr 1 Bratislava main station - Odb Mociar		3	2016	4	2016			120	D4	700	25kV AC		GB	70/400

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Completed	Slovakia	ŽSR	Bratislava - Nové Zámky	Bratislava hl.st.	Odb Močiar	Principal line	oprava koľajového lôžka koľaje koľ. č. 2 Bratislava Vajnory -Odb Močiar	Reconstruction of railway bed on the track Nr 1 Bratislava Vajnory - Odb Mociar		3	2016	4	2016			120	D4	700	25kV AC		GB	70/400
Completed	Slovakia	ŽSR	Kúty - Bratislava	Kúty	Sekule	Principal line	oprava koľajového lôžka koľaje koľ. č. 2 Kúty - Sekule	Reconstruction of railway bed on the track Nr 2 Kúty - Sekule		3	2016	3	2016			140	D3	700	25kV AC		GB	70/400
Completed	Slovakia	ŽSR	Kúty - Bratislava	Kúty	Sekule	Principal line	oprava koľajového lôžka koľaje koľ. č. 1 Kúty - Sekule	Reconstruction of railway bed on the track Nr 1 Kúty - Sekule		4	2016	4	2016			140	D3	700	25kV AC		GB	70/400
Completed	Slovakia	ŽSR	Kúty - Bratislava	Sekule	Veľké Leváre	Principal line	oprava koľajového lôžka traťovej koľaje koľ. č. 1 Sekule - Veľké Leváre	Reconstruction of railway bed on the track rail Nr 1 Sekule - Veľké Leváre		4	2016	4	2016			140	D3	700	25kV AC		GB	70/400
Planned	Slovakia	ŽSR	Bratislava - Štúrovo	Sládkovičovo	Galanta	Principal line	oceľový most v km 98,530	Bridge renewal		7	2017	12	2018	1,80	own resources	120	D4	700	25kV AC		GB	70/400
Planned	Slovakia	ŽSR	Bratislava - Štúrovo	Dvory nad Žitavou	Dvory nad Žitavou	Principal line	Komplexná rekonštrukcia výhybiek č. 14,15,16, 17,18,19,20 v žst Dvory nad Žitavou	Switches renewal		7	2017	7	2017	0,03	own resources	120	D4	700	25kV AC		GB	70/400
Planned	Slovakia	ŽSR	Trnovec nad Váhom - Tvrdošovce	Trnovec nad Váhom	Tvrdošovce	Principal line	Komplexná rekonštrukcia koľaje č.1 dĺžka 9,547 km	Reconstruction, modernization of the track		1	2017	12	2020	6,80	own resources	120	D4	700	25kV AC		GB	70/400
Planned	Slovakia	ŽSR	Dunajská Streda - Komárno	Dolný Štál	Dolný Štál	Diversionary line	Predĺženie staničnej koľaje č. 1	Track and platform renewal, substructure improvement		5	2017	12	2017	3,40	own resources	80	D4	260			GB	70/400
Planned	Slovakia	ŽSR	Bratislava hl.st. - Trnava	Odb. Vinohrady	Odb Vinohrady	Diversionary line	Obnova výhybky č.20	Switches renewal		4	2017	4	2017	0,15	own resources	120	D4	700	25kV AC		GB	70/400
Planned	Slovakia	ŽSR	Bratislava hl.st. - Štúrovo	Galanta	Sládkovičovo	Principal line	oceľový most v km 98,530	Bridge renewal		2	2018	6	2018	3,63	own resources	120	D4	700	25kV AC		GB	70/400
Planned	Slovakia	ŽSR	Bratislava - Rajka	Bratislava Nové Mesto	Bratislava UNS	Principal line	Komplexná rekonštrukcia železničného zvršku koľ. č. 1 a 2 dĺžky 8,650 km	Track and platform renewal, substructure improvement		1	2017	12	2020	8,00	own resources	120	D4	700	25kV AC		GB	70/400
Planned	Slovakia	ŽSR	Kúty - Trnava	Boleráz	Smolenice	Diversionary line	Komplexná rekonštrukcia železničného zvršku dĺžky 4,950 km	Track and platform renewal, substructure improvement		1	2017	12	2017	3,00	own resources	80	D4	720	25kV AC		GB	70/400
Planned	Slovakia	ŽSR	Kúty - Trnava	Boleráz	Šelpice	Diversionary line	Komplexná rekonštrukcia železničného zvršku dĺžky 5,000 km	Track and platform renewal, substructure improvement		1	2017	12	2017	2,00	own resources	80	D4	720	25kV AC		GB	70/400
Planned	Slovakia	ŽSR	Nové Zámky - Komárno	Bajč	Bajč	Diversionary line	rekonštrukcia koľaje č. 3	Track renewal and substructure improvement		7	2017	12	2017	0,30	own resources	100	D4	620	25kV AC		GB	70/400

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Completed	Austria	ÖBB Infra	Wien - Hegyeshalom	Üst Goe 2	Bruck a.d.Leitha -West	Principal line	Ausbau der Hilfsbrücken für die Überfahrtsbrücke im km 38,275	Bridge renewal		02	2016	02	2016									
Completed	Austria	ÖBB Infra	Břeclav - Wien	Strasshof	Gänserndorf	Principal line	Gleisneulage mit UGV	Track renewal and substructure improvement		03	2016	04	2016									
Completed	Austria	ÖBB Infra	Wien - Hegyeshalom	Schwadorf a.d.Fischalst	Götzendorf (in Goe)	Principal line	Gleisaltlage	Track renewal and substructure improvement		04	2016	04	2016									
Completed	Austria	ÖBB Infra	Břeclav - Wien	Gänserndorf	Angern	Principal line	Hilfsbrückeneinbau im km 32,468; im km 32,956 und im km 33,363 auf Gleis 1 und 2	Bridge renewal		05	2016	05	2016									
Completed	Austria	ÖBB Infra	Břeclav - Wien	Gänserndorf	Angern	Principal line	HB-Einbau auf Gleis 2	Bridge renewal		05	2016	05	2016									
Completed	Austria	ÖBB Infra	Břeclav - Wien	Gänserndorf	Angern	Principal line	HB-Einbau auf Gleis 1	Bridge renewal		05	2016	05	2016									
Completed	Austria	ÖBB Infra	Břeclav - Wien	Dürnkrot	Drösing	Principal line	Sanierung EK im km 55,264	Other		05	2016	05	2016									
Completed	Austria	ÖBB Infra	Břeclav - Wien	Sierndorf a.d.March	Drösing	Principal line	EK-Sanierung	Other		05	2016	05	2016									
Completed	Austria	ÖBB Infra	Břeclav - Wien	Sierndorf a.d.March	Drösing	Principal line	EK-Sanierung	Other		05	2016	05	2016									
Completed	Austria	ÖBB Infra	Wien - Hegyeshalom	Kledering		Principal line	Weichenneulage DKW 467/468 + W 469 und Schotterbettreinigung Bgl 563	Switches renewal		05	2016	05	2016									
Completed	Austria	ÖBB Infra	Wien - Hegyeshalom	Lanzendorf - Rannersdorf	Himberg	Principal line	Gründliche Durcharbeitung auf Sgl 1 von km 10,800 bis km 11,200	Track renewal and substructure improvement		06	2016	06	2016									
Completed	Austria	ÖBB Infra	Wien - Hegyeshalom	Kledering		Principal line	Tausch der Gleisbalkenbremse	Other		06	2016	06	2016									
Completed	Austria	ÖBB Infra	Břeclav - Wien	Wien Zvbf		Principal line	Weichenneulage W 211 und 215	Switches renewal		06	2016	06	2016									
Completed	Austria	ÖBB Infra	Wien - Hegyeshalom	Wien Zvbf		Principal line	Weichenneulage W 211 und 215	Switches renewal		06	2016	06	2016									
Completed	Austria	ÖBB Infra	Břeclav - Wien	Wien Zvbf		Principal line	Weichenneulage W 221 und 225	Switches renewal		06	2016	06	2016									
Completed	Austria	ÖBB Infra	Wien - Hegyeshalom	Wien Zvbf		Principal line	Weichenneulage W 221 und 225	Switches renewal		06	2016	06	2016									
Completed	Austria	ÖBB Infra	Břeclav - Wien	Wien Zvbf		Principal line	Weichenneulage W 231 und 235	Switches renewal		06	2016	06	2016									
Completed	Austria	ÖBB Infra	Wien - Hegyeshalom	Wien Zvbf		Principal line	Weichenneulage W 231 und 235	Switches renewal		06	2016	06	2016									
Completed	Austria	ÖBB Infra	Břeclav - Wien	Wien Zvbf		Principal line	Weichenneulage W 241 und 245	Switches renewal		06	2016	06	2016									

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Status	Member state	IM	Line	Section		Category	Project name	Specification	Note	Start		End		Reached parameters								
				From	To					Month	Year	Month	Year	Estimated Financial Requirments [mil. Of EUR]	Financial Sources	Maximum speed [km*h ⁻¹]	Axle load [t] / Line category	Maximum Train Lenght [m]	Traction power	ETCS Level	Track clearan ce	Interm. Code
Completed	Austria	ÖBB Infra	Wien - Hegyeshalom	Wien Zvbf		Principal line	Weichenneulage W 241 und 245	Switches renewal		06	2016	06	2016									
Completed	Austria	ÖBB Infra	Břeclav - Wien	Wien Zvbf		Principal line	Weichenneulage W 251 und 255	Switches renewal		06	2016	06	2016									
Completed	Austria	ÖBB Infra	Wien - Hegyeshalom	Wien Zvbf		Principal line	Weichenneulage W 251 und 255	Switches renewal		06	2016	06	2016									
Completed	Austria	ÖBB Infra	Wien - Hegyeshalom	Üst Goe 2	Bruck a.d.Leitha -West	Principal line	Gleisneulage mit Untergrundsanieru ng und Bstg- Ernerung in den Hst´n Sarasdorf und Wilfleinsdorf	Track and platform renewal, substructure improvement		07	2016	09	2016									
Completed	Austria	ÖBB Infra	Wien - Hegyeshalom	Üst Goe 2	Bruck a.d.Leitha -West	Principal line	Gleisneulage mit Untergrundsanieru ng	Track renewal and substructure improvement		07	2016	09	2016									
Completed	Austria	ÖBB Infra	Wien - Hegyeshalom	Sarasdorf		Principal line	Bstg-Erneuerung in der Hst. Sarasdorf	Track and platform renewal, substructure improvement		07	2016	09	2016									
Completed	Austria	ÖBB Infra	Wien - Hegyeshalom	Wilfleinsdo rf		Principal line	Bstg-Erneuerung in der Hst. Wilfleinsdorf	Track and platform renewal, substructure improvement		07	2016	09	2016									
Completed	Austria	ÖBB Infra	Wien - Hegyeshalom	Oberlaa	Kledering	Principal line	Erneuerung der Oberleitung von km 17,700 bis km 16,600 auf der Str. 124, Erneuerung der Brücke im km 14,740 sowie Gleis- und Weichenneulage auf der Str. 133	Track renewal and substructure improvement		09	2016	10	2016									
Completed	Austria	ÖBB Infra	Wien - Hegyeshalom	AB (Awanst)	Kledering	Principal line	Weichenneulage W 419 und 1U	Switches renewal		09	2016	09	2016									
Completed	Austria	ÖBB Infra	Wien - Hegyeshalom	Kledering		Principal line	Weichenneulage W 419	Switches renewal		09	2016	09	2016									
Completed	Austria	ÖBB Infra	Wien - Hegyeshalom	Bruck a.d.Leitha- West	Bruck a.d.Leitha	Principal line	Weichenschwellen tausch W 2 in Bruck an der Leitha	Switches renewal		10	2016	10	2016									
Completed	Austria	ÖBB Infra	Wien - Hegyeshalom	Bruck a.d.Leitha		Principal line	Weichenschwellen tausch W 5 in Bruck an der Leitha	Switches renewal		10	2016	10	2016									
Completed	Austria	ÖBB Infra	Břeclav - Wien	Gänserndo rf	Angern	Principal line	Tragwerkseinbau im km 32,468; im km 32,956 und im km 33,363 auf Gleis 1 und 2	Bridge renewal		10	2016	11	2016									
Completed	Austria	ÖBB Infra	Břeclav - Wien	Gänserndo rf	Angern	Principal line	Tragwerkseinbau auf Gleis 2	Bridge renewal		10	2016	10	2016									
Completed	Austria	ÖBB Infra	Břeclav - Wien	Gänserndo rf	Angern	Principal line	Tragwerkseinbau auf Gleis 1	Bridge renewal		10	2016	11	2016									

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Status	Member state	IM	Line	Section		Category	Project name	Specification	Note	Start		End		Reached parameters								
				From	To					Month	Year	Month	Year	Estimated Financial Requirments [mil. Of EUR]	Financial Sources	Maximum speed [km*h ⁻¹]	Axle load [t] / Line category	Maximum Train Lenght [m]	Traction power	ETCS Level	Track clearan ce	Interm. Code
Completed	Austria	ÖBB Infra	Wien - Hegyeshalom	Zurndorf	Nickelsdorf	Principal line	Gründliche Durcharbeitung in verschiedenen Abschnitten	Track renewal and substructure improvement		10	2016	10	2016									
Completed	Austria	ÖBB Infra	Břeclav - Wien	Wien Zvbf		Principal line	Weichenneulage mit Schotterbettreinigung auf den Weichen 252, 253, 256 und 257	Switches renewal		11	2016	11	2016									
Completed	Austria	ÖBB Infra	Břeclav - Wien	Wien Zvbf		Principal line	Weichenneulage W 252, 253, 256, 257	Switches renewal		11	2016	11	2016									
Completed	Austria	ÖBB Infra	Wien - Hegyeshalom	Wien Zvbf		Principal line	Weichenneulage mit Schotterbettreinigung auf den Weichen 252, 253, 256 und 257	Switches renewal		11	2016	11	2016									
Completed	Austria	ÖBB Infra	Wien - Hegyeshalom	Wien Zvbf		Principal line	Weichenneulage W 252, 253, 256, 257	Switches renewal		11	2016	11	2016									
Completed	Austria	ÖBB Infra	Břeclav - Wien	Wien Zvbf		Principal line	Weichenneulage mit Schotterbettreinigung auf den Weichen 262, 263, 266 und 267	Switches renewal		11	2016	11	2016									
Completed	Austria	ÖBB Infra	Břeclav - Wien	Wien Zvbf		Principal line	Weichenneulage W 262, 263, 266 und 267	Switches renewal		11	2016	11	2016									
Completed	Austria	ÖBB Infra	Wien - Hegyeshalom	Wien Zvbf		Principal line	Weichenneulage mit Schotterbettreinigung auf den Weichen 262, 263, 266 und 267	Switches renewal		11	2016	11	2016									
Completed	Austria	ÖBB Infra	Wien - Hegyeshalom	Wien Zvbf		Principal line	Weichenneulage W 262, 263, 266 und 267	Switches renewal		11	2016	11	2016									
Completed	Austria	ÖBB Infra	Wien - Hegyeshalom	Götzendorf (in Goe)	Üst Goe 2	Principal line	Erneuerung der EK im km 30,090	Other		11	2016	11	2016									
Completed	Austria	ÖBB Infra	Wien - Hegyeshalom	Götzendorf (in Goe)	Üst Goe 2	Principal line	Erneuerung der EK im km 30,090	Other		11	2016	11	2016									
Completed	Austria	ÖBB Infra	Wien - Hegyeshalom	Üst Goe 2	Bruck a.d.Leitha	Principal line	Ausbau der EK im km 39,734	Other		11	2016	11	2016									
Completed	Austria	ÖBB Infra	Wien - Hegyeshalom	Üst Goe 2	Bruck a.d.Leitha	Principal line	Ausbau der EK im km 39,734	Other		11	2016	11	2016									
Completed	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Terminal Wien Inzersdorf Süd	Ebreichsdorf	Diversionary line	Inbetriebnahme ESTW Hennersdorf und Anschwenkung Gleis 3 sowie Hauptquerung in km 19,2 in Münchendorf	Modernization of the rail traffic management system		02	2016	02	2016									
Completed	Austria	ÖBB Infra	Wien - Wr. Neustadt	Wiener Neustadt Hbf		Diversionary line	alle Weichen Nb Mittelkopf Gleis 1 und 2 (W 86+87)	Switches renewal		03	2016	03	2016									
Completed	Austria	ÖBB Infra	Wr. Neustadt - Sopron	Wiener Neustadt Hbf		Diversionary line	alle Weichen Nb Mittelkopf Gleis 1 und 2 (W 86+87)	Switches renewal		03	2016	03	2016									

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Status	Member state	IM	Line	Section		Category	Project name	Specification	Note	Start		End		Reached parameters								
				From	To					Month	Year	Month	Year	Estimated Financial Requirments [mil. Of EUR]	Financial Sources	Maximum speed [km*h ⁻¹]	Axle load [t] / Line category	Maximum Train Lenght [m]	Traction power	ETCS Level	Track clearan ce	Interm. Code
Completed	Austria	ÖBB Infra	Wien - Wr. Neustadt	Wiener Neustadt Hbf		Diversiionary line	alle Weichen Nb Mittelkopf Gleis 1 und 2 (W 86+87)	Switches renewal		03	2016	03	2016									
Completed	Austria	ÖBB Infra	Wien - Wr. Neustadt	Wiener Neustadt Hbf		Diversiionary line	alle Weichen Nb Mittelkopf Gleis 1 und 2	Switches renewal		03	2016	04	2016									
Completed	Austria	ÖBB Infra	Wr. Neustadt - Sopron	Wiener Neustadt Hbf		Diversiionary line	alle Weichen Nb Mittelkopf Gleis 1 und 2	Switches renewal		03	2016	04	2016									
Completed	Austria	ÖBB Infra	Wien - Wr. Neustadt	Wiener Neustadt Hbf		Diversiionary line	alle Weichen Nb Mittelkopf Gleis 1 und 2	Switches renewal		03	2016	04	2016									
Completed	Austria	ÖBB Infra	Wien - Wr. Neustadt	Wiener Neustadt Hbf		Diversiionary line	Tausch W 131	Switches renewal		04	2016	04	2016									
Completed	Austria	ÖBB Infra	Wr. Neustadt - Sopron	Wiener Neustadt Hbf		Diversiionary line	Tausch W 131	Switches renewal		04	2016	04	2016									
Completed	Austria	ÖBB Infra	Wien - Wr. Neustadt	Wiener Neustadt Hbf		Diversiionary line	Tausch W 131	Switches renewal		04	2016	04	2016									
Completed	Austria	ÖBB Infra	Wien - Wr. Neustadt	Wiener Neustadt Hbf		Diversiionary line	Fertigstellungsarb eiten Gleis 1	Track renewal and substructure improvement		04	2016	04	2016									
Completed	Austria	ÖBB Infra	Wr. Neustadt - Sopron	Wiener Neustadt Hbf		Diversiionary line	Fertigstellungsarb eiten Gleis 1	Track renewal and substructure improvement		04	2016	04	2016									
Completed	Austria	ÖBB Infra	Wien - Wr. Neustadt	Wiener Neustadt Hbf		Diversiionary line	Fertigstellungsarb eiten Gleis 1	Track renewal and substructure improvement		04	2016	04	2016									
Completed	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Kledering		Diversiionary line	Weichenneulage DKW 467/468 + W 469 und Schotterbettreinigu ng Bgl 563	Switches renewal		05	2016	05	2016									
Completed	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Wien Blumental	Ebreichsd orf	Diversiionary line	Querungen in Hennersdorf und Münschendorf, EK-Umlegung in Hennersdorf	Other		06	2016	06	2016									
Completed	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Kledering		Diversiionary line	Tausch der Gleisbalkenbrems e	Other		06	2016	06	2016									
Completed	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Wien Zvbf		Diversiionary line	Weichenneulage W 211 und 215	Switches renewal		06	2016	06	2016									
Completed	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Wien Zvbf		Diversiionary line	Weichenneulage W 221 und 225	Switches renewal		06	2016	06	2016									
Completed	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Wien Zvbf		Diversiionary line	Weichenneulage W 231 und 235	Switches renewal		06	2016	06	2016									
Completed	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Wien Zvbf		Diversiionary line	Weichenneulage W 241 und 245	Switches renewal		06	2016	06	2016									
Completed	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Wien Zvbf		Diversiionary line	Weichenneulage W 251 und 255	Switches renewal		06	2016	06	2016									
Completed	Austria	ÖBB Infra	Wien - Wr. Neustadt	Felixdorf	Wiener Neustadt Hbf- Gleisgr 200	Diversiionary line	Gleisneulage	Track renewal and substructure improvement		07	2016	07	2016									

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Status	Member state	IM	Line	Section		Category	Project name	Specification	Note	Start		End		Reached parameters								
				From	To					Month	Year	Month	Year	Estimated Financial Requirments [mil. Of EUR]	Financial Sources	Maximum speed [km*h ⁻¹]	Axle load [t] / Line category	Maximum Train Lenght [m]	Traction power	ETCS Level	Track clearan ce	Interm. Code
Completed	Austria	ÖBB Infra	Wien - Wr. Neustadt	Liesing	Brunn-Maria Enzersdor f Nord	Diversionary line	Gleisneulage mit Untergrundverstär kung	Track renewal and substructure improvement		07	2016	08	2016									
Completed	Austria	ÖBB Infra	Wien - Wr. Neustadt	Liesing	Brunn-Maria Enzersdor f Nord	Diversionary line	Gleisneulage mit Untergrundverstär kung	Track renewal and substructure improvement		08	2016	08	2016									
Completed	Austria	ÖBB Infra	Wien - Wr. Neustadt	Wiener Neustadt Hbf		Diversionary line	Gleisneulage	Track renewal and substructure improvement		08	2016	09	2016									
Completed	Austria	ÖBB Infra	Wien - Wr. Neustadt	Wiener Neustadt Hbf		Diversionary line	Gleisneulage	Track renewal and substructure improvement		08	2016	09	2016									
Completed	Austria	ÖBB Infra	Wr. Neustadt - Sopron	Wiener Neustadt Hbf		Diversionary line	Gleisneulage	Track renewal and substructure improvement		08	2016	09	2016									
Completed	Austria	ÖBB Infra	Wr. Neustadt - Sopron	Wiener Neustadt Hbf		Diversionary line	Gleisneulage	Track renewal and substructure improvement		08	2016	09	2016									
Completed	Austria	ÖBB Infra	Wien - Wr. Neustadt	Wiener Neustadt Hbf		Diversionary line	Gleisneulage	Track renewal and substructure improvement		08	2016	09	2016									
Completed	Austria	ÖBB Infra	Wien - Wr. Neustadt	Wiener Neustadt Hbf		Diversionary line	Gleisneulage	Track renewal and substructure improvement		08	2016	09	2016									
Completed	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Abzww Ebenfurth Nord	Abzww Ebenfurth Süd	Diversionary line	Inbetriebnahme ESTW Obereggendorf, Anpassung Streckenblockund Migration in BFZ Wien	Modernization of the rail traffic management system		09	2016	09	2016									
Completed	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Abzww Ebenfurth Nord	Abzww Ebenfurth Süd	Diversionary line	Inbetriebnahme ESTW Obereggendorf, Anpassung Streckenblockund Migration in BFZ Wien	Modernization of the rail traffic management system		09	2016	09	2016									
Completed	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Oberlaa	Kledering	Diversionary line	Erneuerung der Oberleitung von km 17,700 bis km 16,600 auf der Str. 124, Erneuerung der Brücke im km 14,740 sowie Gleis- und Weichenneulage auf der Str. 133	Track renewal and substructure improvement		09	2016	10	2016									
Completed	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Oberlaa	Wien Zvbf-Nord	Diversionary line	Erneuerung der Oberleitung von km 14,700 bis km 16,600 und Brückenerneuerun g im km 14,740	Bridge renewal		09	2016	10	2016									

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Status	Member state	IM	Line	Section		Category	Project name	Specification	Note	Start		End		Reached parameters								
				From	To					Month	Year	Month	Year	Estimated Financial Requirments [mil. Of EUR]	Financial Sources	Maximum speed [km*h ⁻¹]	Axle load [t] / Line category	Maximum Train Lenght [m]	Traction power	ETCS Level	Track clearan ce	Interm. Code
Completed	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Oberlaa	Wien Zvbf-Nord	Diversiionary line	Brückenerneuerung im km 14,740 - Spundwände rammen	Bridge renewal		09	2016	09	2016									
Completed	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	AB (Awanst)	Kledering	Diversiionary line	Weichenneulage W 419 und 1U	Switches renewal		09	2016	09	2016									
Completed	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Wien Zvbf-Nord		Diversiionary line	Gründliche Durcharbeitung W 952, 953	Switches renewal		10	2016	10	2016									
Completed	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Oberlaa		Diversiionary line	Brückenerneuerung im km 14,740 (km 0,800 der Str. 133)	Bridge renewal		10	2016	10	2016									
Completed	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Oberlaa	AB (Awanst)	Diversiionary line	Gleisneulage mit Schotterbettreinigung von km 0,670 bis km 1,860 und verlegen der Weichen 57 + 58	Track renewal and substructure improvement		10	2016	10	2016									
Completed	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Kledering		Diversiionary line	Weichenneulage W 419	Switches renewal		09	2016	09	2016									
Completed	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Abzww Ebenfurth Nord	Ebenfurth	Diversiionary line	Nachrüstung Gleisfreimeldeanlage	Modernization of the rail traffic management system		10	2016	10	2016									
Completed	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Abzww Ebenfurth Nord	Ebenfurth	Diversiionary line	Nachrüstung Gleisfreimeldeanlage	Modernization of the rail traffic management system		10	2016	10	2016									
Completed	Austria	ÖBB Infra	Wien - Wr. Neustadt	Pfaffstätten		Diversiionary line	Weichenneulage W 31, 32	Switches renewal		10	2016	10	2016									
Completed	Austria	ÖBB Infra	Wien - Wr. Neustadt	Felixdorf		Diversiionary line	Gleisneulage	Track renewal and substructure improvement		10	2016	10	2016									
Completed	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Achau	Ebreichsdorf	Diversiionary line	Inbetriebnahme ESTW Münchendorf	Modernization of the rail traffic management system		10	2016	11	2016									
Completed	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Wien Zvbf		Diversiionary line	Weichenneulage mit Schotterbettreinigung auf den Weichen 252, 253, 256 und 257	Switches renewal		11	2016	11	2016									
Completed	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Wien Zvbf		Diversiionary line	Weichenneulage W 252, 253, 256, 257	Switches renewal		11	2016	11	2016									
Completed	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Wien Zvbf		Diversiionary line	Weichenneulage mit Schotterbettreinigung auf den Weichen 262, 263, 266 und 267	Switches renewal		11	2016	11	2016									
Completed	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Wien Zvbf		Diversiionary line	Weichenneulage W 262, 263, 266 und 267	Switches renewal		11	2016	11	2016									

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Status	Member state	IM	Line	Section		Category	Project name	Specification	Note	Start		End		Reached parameters								
				From	To					Month	Year	Month	Year	Estimated Financial Requirments [mil. Of EUR]	Financial Sources	Maximum speed [km*h ⁻¹]	Axle load [t] / Line category	Maximum Train Lenght [m]	Traction power	ETCS Level	Track clearan ce	Interm. Code
Planned	Austria	ÖBB Infra	Břeclav - Wien	Wien Erzherzog Karl- Straße	Abzw St 1	Diversionary line	2-gl. Ausbau Stadlau - Marchegg - Modul 1 (Einbau von 2 Bauweichen im Bereich Hausfeldstr.)	Reconstructio n, modernization of the track		03	2017	03	2017									
Planned	Austria	ÖBB Infra	Wien - Hegyeshalom	Götzendorf (in Goe)		Diversionary line	Weichenneulage mit UGV der Weichen 1, 2, 3, 4, 5 und 7	Switches renewal		04	2017	04	2017									
Planned	Austria	ÖBB Infra	Wien - Hegyeshalom	Götzendorf (in Goe)		Diversionary line	Abtrag der Weichen 2, 3 + 7: UGV und verlegen W 7	Switches renewal		04	2017	04	2017									
Planned	Austria	ÖBB Infra	Wien - Hegyeshalom	Götzendorf (in Goe)		Diversionary line	Abtrag der Weichen 1, 4 + 5, UGV und Weichen neu verlegen	Switches renewal		04	2017	04	2017									
Planned	Austria	ÖBB Infra	Wien - Hegyeshalom	Götzendorf (in Goe)		Diversionary line	Verlegen der Weichen 2 + 3	Switches renewal		04	2017	04	2017									
Planned	Austria	ÖBB Infra	Břeclav - Wien	Gänserndorf	Angern	Diversionary line	Gleisneulage mit UGV sowie Bstg- Erneuerung in den Hast. Weikendorf- D. und Tallesbrunn	Track renewal and substructure improvement		04	2017	06	2017									
Planned	Austria	ÖBB Infra	Břeclav - Wien	Gänserndorf	Angern	Diversionary line	Gleisneulage und UGV auf Sgl 1 von km 32,128 bis km km 36,208 sowie Bstg-Erneuerung in den Hast. Weichendorf-D. und Tallesbrunn	Track renewal and substructure improvement		04	2017	05	2017									
Planned	Austria	ÖBB Infra	Břeclav - Wien	Tallesbrunn	Angern	Diversionary line	Erneuerung der Oberleitung auf Sgl 1 und 2 und Neubau Schaltgerüst im Bf Angern	Other		04	2017	06	2017									
Planned	Austria	ÖBB Infra	Břeclav - Wien	Gänserndorf	Angern	Diversionary line	Gleisneulage und UGV auf Sgl 2 von km 32,128 bis km km 33,610 sowie Bstg-Erneuerung in der Hast. Weichendorf-D	Track and platform renewal, substructure improvement		05	2017	06	2017									
Planned	Austria	ÖBB Infra	Wien - Hegyeshalom	Kledering		Diversionary line	Gleisneulage mit Schotterbettreinigung	Track renewal and substructure improvement		05	2017	05	2017									
Planned	Austria	ÖBB Infra	Břeclav - Wien	Wien Erzherzog Karl- Straße	Abzw St 1	Diversionary line	2-gl. Ausbau Stadlau - Marchegg - Modul 1 (Gleisanschwenkung an Provisorium)	Reconstructio n, modernization of the track		05	2017	05	2017									
Planned	Austria	ÖBB Infra	Břeclav - Wien	Stadlau Fbf		Diversionary line	Weichenneulage W 8, 11, 13 - 17 + 20	Switches renewal		06	2017	06	2017									
Planned	Austria	ÖBB Infra	Břeclav - Wien	Wien Stadlau		Diversionary line	Weichenneulage W 8 + 20	Switches renewal		06	2017	06	2017									

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Status	Member state	IM	Line	Section		Category	Project name	Specification	Note	Start		End		Reached parameters								
				From	To					Month	Year	Month	Year	Estimated Financial Requirments [mil. Of EUR]	Financial Sources	Maximum speed [km*h ⁻¹]	Axle load [t] / Line category	Maximum Train Lenght [m]	Traction power	ETCS Level	Track clearan ce	Interm. Code
Planned	Austria	ÖBB Infra	Břeclav - Wien	Wien Stadlau		Diversiionary line	Weichenneulage W 11	Switches renewal		06	2017	06	2017									
Planned	Austria	ÖBB Infra	Břeclav - Wien	Stadlau Fbf		Diversiionary line	Weichenneulage W 13 - 17	Switches renewal		06	2017	06	2017									
Planned	Austria	ÖBB Infra	Břeclav - Wien	Deutsch Wagram	Strasshof	Diversiionary line	Gleisneulage mit UGV	Track renewal and substructure improvement		07	2017	08	2017									
Planned	Austria	ÖBB Infra	Wien - Hegyeshalom	Deutsch Wagram	Strasshof	Diversiionary line	Gleisneulage mit UGV	Track renewal and substructure improvement		07	2017	08	2017									
Planned	Austria	ÖBB Infra	Břeclav - Wien	Hasenleite n	Wien Erdbergerl ände	Diversiionary line	Gleisneulage mit Schotterbettreinigung (RU)	Track renewal and substructure improvement		08	2017	08	2017									
Planned	Austria	ÖBB Infra	Břeclav - Wien	Wien Erdbergerl ände	Stadlau Fbf	Diversiionary line	Weichenneulage W 58 + 68 in Wien Erdbergerlände sowie Gleisneulage und Brückenholztausch von km 7,625 bis km 8,384	Switches renewal		08	2017	08	2017									
Planned	Austria	ÖBB Infra	Břeclav - Wien	Wien Erdbergerl ände		Diversiionary line	Weichenneulage W 58 und 68	Switches renewal		08	2017	08	2017									
Planned	Austria	ÖBB Infra	Břeclav - Wien	Wien Erdbergerl ände	Wien Stadlau	Diversiionary line	Gleisneulage und Brückenholztausch	Track renewal and substructure improvement		08	2017	08	2017									
Planned	Austria	ÖBB Infra	Wien - Hegyeshalom	Üst Goe 2	Bruck a.d.Leitha -West	Diversiionary line	Bahnsteigerneuerung in den Hst'n Sarasdorf und Wilfleinsdorf	Track and platform renewal, substructure improvement		08	2017	09	2017									
Planned	Austria	ÖBB Infra	Wien - Hegyeshalom	Sarasdorf	Wilfleinsdorf	Diversiionary line	Bahnsteigerneuerung in den Hst'n Sarasdorf und Wilfleinsdorf	Track and platform renewal, substructure improvement		09	2017	09	2017									
Planned	Austria	ÖBB Infra	Wien - Hegyeshalom	Gramatneusiedl		Diversiionary line	Gleisneulage	Track renewal and substructure improvement		09	2017	10	2017									
Planned	Austria	ÖBB Infra	Břeclav - Wien	Strasshof		Diversiionary line	Gleisaltlage auf Bgl 226	Track renewal and substructure improvement		10	2017	10	2017									
Planned	Austria	ÖBB Infra	Wien - Wr. Neustadt	Wiener Neustadt Hbf		Diversiionary line	Weichenneulage W 77, 78, 79	Switches renewal		03	2017	03	2017									
Planned	Austria	ÖBB Infra	Wr. Neustadt - Sopron	Wiener Neustadt Hbf		Diversiionary line	Weichenneulage W 77, 78, 79	Switches renewal		03	2017	03	2017									
Planned	Austria	ÖBB Infra	Wien - Wr. Neustadt	Wiener Neustadt Hbf		Diversiionary line	Weichenneulage W 77, 78, 79	Switches renewal		03	2017	03	2017									
Planned	Austria	ÖBB Infra	Wien - Wr. Neustadt	Wiener Neustadt Hbf	Wiener Neustadt Hbf-Gleisgr 600	Diversiionary line	Gleisaltlage	Track renewal and substructure improvement		03	2017	03	2017									

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				From	To					Estimated Financial Requirments [mil. Of EUR]	Financial Sources	Maximum speed [km*h ⁻¹]	Axle load [t] / Line category	Maximum Train Lenght [m]	Traction power	ETCS Level	Track clearan ce	Interm. Code				
																			Month	Year	Month	Year
Planned	Austria	ÖBB Infra	Wr. Neustadt - Sopron	Wiener Neustadt Hbf	Wiener Neustadt Hbf- Gleisgr 600	Diversionary line	Gleisaltlage	Track renewal and substructure improvement		03	2017	03	2017									
Planned	Austria	ÖBB Infra	Břeclav - Wien	Gänserndorf	Angern	Diversionary line	Gleisneulage mit UGV sowie Bstg- Erneuerung in den Hast. Weikendorf- D. und Tallesbrunn	Track and platform renewal, substructure improvement		04	2017	06	2017									
Planned	Austria	ÖBB Infra	Břeclav - Wien	Gänserndorf	Angern	Diversionary line	Gleisneulage und UGV auf Sgl 1 von km 32,128 bis km 36,208 sowie Bstg-erneuerung in den Hast. Weichendorf-D. und Tallesbrunn	Track and platform renewal, substructure improvement		04	2017	05	2017									
Planned	Austria	ÖBB Infra	Břeclav - Wien	Gänserndorf	Angern	Diversionary line	Gleisneulage und UGV auf Sgl 2 von km 32,128 bis km 33,610 sowie Bstg-erneuerung in der Hast. Weichendorf-D	Track and platform renewal, substructure improvement		05	2017	06	2017									
Planned	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Kledering		Diversionary line	Gleisneulage mit Schotterbettreinigung	Track renewal and substructure improvement		05	2017	05	2017									
Planned	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Wien Blumental	Ebreichsdorf	Diversionary line	zweigleisiger Ausbau Pottendorfer Linie	Reconstruction, modernization of the track		06	2017	09	2017									
Planned	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Deutsch Wagram	Strasshof	Diversionary line	Gleisneulage mit UGV	Track renewal and substructure improvement		07	2017	08	2017									
Planned	Austria	ÖBB Infra	Břeclav - Wien	Wien Zvbf- Einfgr		Diversionary line	Weichenneulage W 129, 130, 131, 132 + 133	Switches renewal		05	2018	05	2018									
Planned	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Wien Blumental	Ebreichsdorf	Diversionary line	zweigleisiger Ausbau Pottendorfer Linie	Reconstruction, modernization of the track		07	2018	08	2018									
Planned	Austria	ÖBB Infra	Břeclav - Wien	Süßenbrunn	Bernhardsthal	Principal line	Süßenbrunn - Bernhardsthal; Line Upgrade	Reconstruction, modernization of the track	Increase maximum speed and capacity		ongoing	12	2026	592,00	national	160	D4	740	~15 kV/16,7 Hz	L2	GC	70/400
Planned	Austria	ÖBB Infra	Gänserndorf - Devínska Nová V	Gänserndorf	Marchegg	Diversionary line	Upgrade Marchegger Ast	Electrification		1	2021	12	2024	41,00	national	160	D4	740	~15 kV/16,7 Hz	L2	GC	70/400
Planned	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron	Wien	Wampersdorf	Principal line	Wien Blumental - Wampersdorf; 2-track Upgrade Pottendorferlinie	Reconstruction, modernization of the track	Increase maximum speed and capacity		ongoing	12	2024	620,00	national	200	D4	740	~15 kV/16,7 Hz	L2	GC	70/400
Planned	Austria	ÖBB Infra	Wien - Hegyeshalom			Principal line	ETCS Implementation	ETCS Implementation				12	2022		national	140	D4	650	~15 kV/16,7 Hz	L2	GC	70/400
Planned	Austria	ÖBB Infra	Wien - Wr. Neustadt			Diversionary line	ETCS Implementation	ETCS Implementation				12	2030		national	160	D4	650	~15 kV/16,7 Hz	L2	GC	70/400
Planned	Austria	ÖBB Infra	Wien - Ebenfurth - Sopron			Principal line	Ebenfurth; construction loop	Other	New connection loop line Wampersdorf- Ebenfurth with	1	2021	12	2025	176,00	national	140	D4	740	~25 kV/50 Hz	L2	GC	70/400

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																			Month	Year	Month	Year
									line Ebenfurth-Sopron													
Completed	Hungary	MÁV	Rajka - Ferencváros			Principal line	Hegyeshalom station	Maintenance of overhead line		16.4.2016		18.4.2016										
Completed	Hungary	MÁV	Rajka - Ferencváros			Principal line	Hegyeshalom station	Maintenance of overhead line		23.4.2016		25.4.2016										
Completed	Hungary	MÁV	Ferencváros - Szolnok (120a)			Principal line	Rákos station	Change of turnout		7.5.2016		11.5.2016										
Completed	Hungary	MÁV	Ferencváros - Szolnok (120a)			Principal line	Hatvan - Jászberény	Renewal and Maintenance of track		16.5.2016		26.5.2016										
Completed	Hungary	MÁV	Ferencváros - Szolnok (120a)			Principal line	Jászberény - Újszász	Renewal and Maintenance of track		19.9.2016		26.9.2016										
Completed	Hungary	MÁV	Püspökladány - Biharkeresztes			Principal line	Püspökladány - Biharkeresztes border	Track reconstruction		19.7.2016		1.8.2016										
Completed	Hungary	G Y S E V	Rajka-Hegyeshalom	Rajka	Hegyeshalom	Principal line	Deployment of ETCS Level 1 between Rajka - Hegyeshalom - HU/SK border in order to comply with requirements of EU regulation 2012/88/EU which defines that the elements of the ERTMS E corridor has to be implemented until the end of 2015.	ETCS Implementation		June	2014	October	2015	2 035 237,66	85% Cohesion Funds 2007-2014 Transp. OP 15% Hungarian state budget					ETCS Level 1		
Planned	Hungary	G Y S E V	Rajka - Hegyeshalom	Rajka	Hegyeshalom	Principal line	"Preparatory activities for the upgrade of the Hegyeshalom-Rajka (HU/SK border) railway line section" Preparatory CEF proect	Other	total upgrade of the Hegyeshalom-Rajka (HU/SK border) railway line section -> this will be the first phase of the project: preparation of feasibility study; preparation of Environmental Impact Assessment & Natura2000 compliance; acquisition of approvals and permits from railway authorities and environmental bodies. The planned main parameters: fulfilling TSI's; removal of bottlenecks: 22,5	October	2017	April	2019	2 233 782,00	85% CEF 15% Hungarian state budget	To be defined by Feasibility study	22,5 t (Final goal of the implementation project)	To be defined by Feasibility study	To be defined by Feasibility study	To be defined by Feasibility study	To be defined by Feasibility study	

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				From	To					Estimated Financial Requirments [mil. Of EUR]	Financial Sources	Maximum speed [km*h ⁻¹]	Axle load [t] / Line category	Maximum Train Lenght [m]	Traction power	ETCS Level	Track clearan ce	Interm. Code				
																			Month	Year	Month	Year
									t axle load. Bridges, culverts to upgrade Power supply and catenary system renewal													
Completed	Romania	CFR	Romanian/Hungarian Border – Curtici - Simeria	Romanian/Hungarian Border - Curtici	Arad -Km 614	Principal line	Rehabilitation of the railway line Border – Curtici – Simeria, component part of the IV European corridor for the trains circulation with a maximum speed of 160 km/h: section 1: Border – Curtici – Arad - km 614	Reconstruction, modernization of the track; ETCS Level 2 + GSM-R Implementation		March	2012	September (finalised works in operational tests)	2017	257,26	Cohesion Fund+State Budget	120 km/h for carry freight trains 160 km/h for passenger trains	22,5 t/axle UIC505-1 GC	750	25 kV/ 50 Hz	ETCSL2	UIC-B	45/375
Ongoing	Romania	CFR	Romanian/Hungarian Border – Curtici - Simeria	Km 614	Bârzava	Principal line	Rehabilitation of the railway line Border – Curtici – Simeria, component part of the IV European corridor for the trains circulation with a maximum speed of 160 km/h: Section 2: km 614 - Gurasada and Section 3: Gurasada - Simeria	Reconstruction, modernization of the track		July	2017	July	2020	368,70	Cohesion Fund+State Budget	120 km/h for carry freight trains 160 km/h for passenger trains	22,5 t/axle UIC505-1 GC	750	25 kV/ 50 Hz	ETCSL2	UIC-B	45/375
Ongoing	Romania	CFR	Romanian/Hungarian Border – Curtici - Simeria	Bârzava	Ilteu	Principal line	Rehabilitation of the railway line Border – Curtici – Simeria, component part of the IV European corridor for the trains circulation with a maximum speed of 160 km/h: Section 2: km 614 - Gurasada and Section 3: Gurasada - Simeria	Reconstruction, modernization of the track		July	2017	July	2020	384,74	Cohesion Fund+State Budget	120 km/h for carry freight trains 160 km/h for passenger trains	22,5 t/axle UIC505-1 GC	750	25 kV/ 50 Hz	ETCSL2	UIC-B	45/375

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				From	To					Month	Year	Month	Year	Estimated Financial Requirments [mil. Of EUR]	Financial Sources	Maximum speed [km*h ⁻¹]	Axle load [t] / Line category	Maximum Train Lenght [m]	Traction power	ETCS Level	Track clearance	Interm. Code
Planned	Romania	CFR	Romanian/Hungarian Border – Curtici - Simeria	Ilteu	Gurasada	Principal line	Rehabilitation of the railway line Border – Curtici – Simeria, component part of the IV European corridor for the trains circulation with a maximum speed of 160 km/h: Section 2: km 614 - Gurasada and Section 3: Gurasada - Simeria	Reconstruction, modernization of the track			na		na	327,45	Cohesion Fund+State Budget	120 km/h for carry freight trains 160 km/h for passenger trains	22,5 t/osie UIC505-1 GC	750	25 kV/ 50 Hz	ETCSL2	UIC-B	45/375
Ongoing	Romania	CFR	Romanian/Hungarian Border – Curtici - Simeria	Gurasada	Simeria	Principal line	Rehabilitation of the railway line Border – Curtici – Simeria, component part of the IV European corridor for the trains circulation with a maximum speed of 160 km/h: Section 2: km 614 - Gurasada and Section 3: Gurasada - Simeria	Reconstruction, modernization of the track		September	2017	September	2020	575,06	Cohesion Fund+State Budget	120 km/h for carry freight trains 160 km/h for passenger trains	22,5 t/axle UIC505-1 GC	750	25 kV/ 50 Hz	ETCSL2	UIC-B	45/375
Ongoing	Romania	CFR	Brasov - Simeria	Simeria	Vintu de Jos	Principal line	Rehabilitation of the railway line Brasov - Simeria, component part of the IV European corridor for the trains circulation with a maximum speed of 160 km/h, Section Simeria - Coslariu	Reconstruction, modernization of the track		December	2013	April	2019	310,61	Cohesion Fund+State Budget	120 km/h for carry freight trains 160 km/h for passenger trains	22,5 t/axle UIC505-1 GC	750 m	25 kV/ 50 Hz	ETCSL2	UIC 505-4 GB	45/375
Ongoing	Romania	CFR	Brasov - Simeria	Vintu de Jos	Coslariu	Principal line	Rehabilitation of the railway line Brasov - Simeria, component part of the IV European corridor for the trains circulation with a maximum speed of 160 km/h, Section Simeria - Coslariu	Reconstruction, modernization of the track		December	2011	May	2019	176,39	Cohesion Fund+State Budget	120 km/h for carry freight trains 160 km/h for passenger trains	22,5 t/axle UIC505-1 GC	750 m	25 kV/ 50 Hz	ETCSL2	UIC 505-4 GB	45/375

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				From	To					Month	Year	Month	Year	Estimated Financial Requirments [mil. Of EUR]	Financial Sources	Maximum speed [km*h ⁻¹]	Axle load [t] / Line category	Maximum Train Lenght [m]	Traction power	ETCS Level	Track clearan ce	Interm. Code
Ongoing	Romania	CFR	Brasov - Simeria ETCS Coslariu - Simeria	Coslariu	Simeria	Principal line	Rehabilitation of the railway line Brasov - Simeria, component part of the IV European corridor for the trains circulation with a maximum speed of 160 km/h, Section Simeria - Coslariu	ETCS Level 2 + GSM-R Implementation		November	2014	December	2019	54,01	Cohesion Fund+State Budget	120 km/h for carry freight trains 160 km/h for passenger trains	-	-	-	ETCSL2	-	
Ongoing	Romania	CFR	Brasov - Simeria	Micasasa	Coslariu	Principal line	Rehabilitation of the railway line Brasov - Simeria, component part of the IV European corridor for the trains circulation with a maximum speed of 160 km/h, Section Coslariu - Sighisoara	Reconstruction, modernization of the track		June	2012	November	2017	162,63	Cohesion Fund+State Budget	120 km/h for carry freight trains 160 km/h for passenger trains	22,5 t/axle UIC505-1 GC	750 m	25 kV/ 50 Hz	ETCSL2	UIC 505-4 GB	45/375
Ongoing	Romania	CFR	Brasov - Simeria	Atel	Micasasa	Principal line	Rehabilitation of the railway line Brasov - Simeria, component part of the IV European corridor for the trains circulation with a maximum speed of 160 km/h, Section Coslariu - Sighisoara	Reconstruction, modernization of the track		June	2012	April	2019	168,41	Cohesion Fund+State Budget	120 km/h for carry freight trains 160 km/h for passenger trains	22,5 t/axle UIC505-1 GC	750 m	25 kV/ 50 Hz	ETCSL2	UIC 505-4 GB	45/375
Ongoing	Romania	CFR	Brasov - Simeria	Sighisoara	Atel	Principal line	Rehabilitation of the railway line Brasov - Simeria, component part of the IV European corridor for the trains circulation with a maximum speed of 160 km/h, Section Coslariu - Sighisoara	Reconstruction, modernization of the track		March	2012	October	2019	195,29	Cohesion Fund+State Budget	120 km/h for carry freight trains 160 km/h for passenger trains	22,5 t/axle UIC505-1 GC	750 m	25 kV/ 50 Hz	ETCSL2	UIC 505-4 GB	45/375
Ongoing	Romania	CFR	Brasov - Simeria ERTMS Sighisoara - Coslariu	Sighisoara	Coslariu	Principal line	Rehabilitation of the railway line Brasov - Simeria, component part of the IV European corridor for the trains circulation with a maximum speed of 160 km/h, Section Coslariu - Sighisoara	ETCS Level 2 + GSM-R Implementation		November	2014	December	2019	59,36	Cohesion Fund+State Budget	NA	-	-	-	ETCSL2	-	
Ongoing	Romania	CFR	Brazi - Buciumeni			Principal line	Operational pilot project for ETCS/ERTMS level 2	ETCS Level 2 + GSM-R Implementation		November	2011	December	2015	51,18	Cohesion Fund+State Budget	NA	-	-	-	ETCSL2	-	

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Ongoing	Romania	CFR	Fetești-Cernavodă			Principal line	Rehabilitation of Danube bridges at km 152+149 and km 165+817 on Bucuresti - Constanta railway line	Rehabilitation of the bridge superstructure , modernization of the track		Septem ber	2014	Novem ber	2017	0,53	Cohesion Fund+Sta te Budget	120 km/h for carry freight trains 160 km/h for passenger trains	-	-	-	NA	-	
Completed	Bulgaria	NRIC	Sofia-Plovdiv			Principal line	Modernisation of the Railway Section Septemvri - Plovdiv - Part of Trans-European Railway Network	Modernisation		12	2012	8	2017	130,00	OPT	160	22,5 I Cat.	750	25 kv AC	L-1	1 CM-2	55/385
Completed	Bulgaria	NRIC	Dimitrovgrad - Nova Nadezda - Simeonovgrad - Harmanli - Luibimetz - Svilengrad			Principal line	"Reconstruction and Electrification of the Railway Line Dimitrovgrad - Svilengrad"	Modernisation		2	2012	12	2016	145,00	OPT	160	22,5 I Cat.	750	25 kv AC	L-1	1 CM-2	55/385
Completed	Bulgaria	NRIC					"Reconstruction and Electrification of the Railway Line Dimitrovgrad - Harmanli" Phase 4.1 "Dimitravgrad - Harmanli"	Modernisation		2	2012	12	2016	80,00	OPT	160	22,5 I Cat.	750	25 kv AC	L-1	1 CM-2	55/385
Completed	Bulgaria	NRIC				Principal line	"Reconstruction and Electrification of the railway line Dimitrovgrad - Harmanli" Phase 4.2 "Harmanli - Svilengrad"	Modernisation		2	2012	7	2016	65,00	OPT	160	22,5 I Cat.	750	25 kv AC	L-1	1 CM-2	55/385
Completed	Bulgaria	NRIC	Plovdiv Marshaling Yard Iztok - Stara Zagora - Zimnitsa - Karnobat - Burgas			Principal line	"Railway Infrastructure Rehabilitation along Section of Plovdiv – Burgas Railway line"	Modernisation		3	2011	1	2017	235,00	OPT	160	22,5 I Cat.	620	25 kv AC	L-1	1 CM-2	55/385
Completed	Bulgaria	NRIC					Pos. 1 - "Rehabilitation of the railway section Mihaylovo-Kaloyanovets, including the main tracks in stations Mihaylovo - Kaloyanovets"	Modernisation	* **	3	2011	4	2014	15,00	OPT	160	22,5 I Cat.	830	25 kv AC	L-1	1 CM-2	55/385
Completed	Bulgaria	NRIC					Pos. 2 - "Rehabilitation of Stara Zagora – Zavoy Railway Sections and Zavoy- Zimnitsa, including the Main Tracks and Stara Zagora and Yambol Stations and all Stations and Halts between them"	Modernisation		3	2011	12	2016	77,00	OPT	160	22,5 I Cat.	705	25 kv AC	L-1	1 CM-2	55/385

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				From	To					Month	Year	Month	Year	Estimated Financial Requirments [mil. Of EUR]	Financial Sources	Maximum speed [km*h ⁻¹]	Axle load [t] / Line category	Maximum Train Lenght [m]	Traction power	ETCS Level	Track clearan ce	Interm. Code
Completed	Bulgaria	NRIC					"Rehabilitation of Stara Zagora – Zavoy Railway Sections and Zavoy- Zimnitsa, including the Main Tracks and Stara Zagora and Yambol Stations and all Stations and Halts between them" - Additional works	Modernisation		7	2015	12	2016	6,00	OPT	160	22,5 I Cat.	705	25 kv AC	L-1	1 CM-2	55/385
Completed	Bulgaria	NRIC					Pos. 3 - "Rehabilitation of Tserkovski – Karnobat Railway Section, including the Main Tracks in Tserkovski Station and Renewal of the Track in Karnobat-Burgas Section, including the Main Tracks in Karnobat and Burgas Stations and all Stations and Halts between them"	Modernisation		3	2011	2	2017	69,00	OPT	160	22,5 I Cat.	690	25 kv AC	L-1	1 CM-2	55/385
Completed	Bulgaria	NRIC					"Rehabilitation of the Railway Infrastructure along Sections of Plovdiv - Burgas Railway Line – rehabilitation, repair and modernization of sub-stations Stara Zagora and Nova Zagora and construction of tele-management system of TS (traction sub-stations), SP (sectional posts) and SD (sectional dis-connectors) from Plovdiv CDC (central dispatcher center)"	Modernisation		11	2014	11	2016	8,00	OPT	n.a.	22,5 I Cat.	n.a.	25 kv AC	L-1	1 CM-2	55/385

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				From	To					Month	Year	Month	Year	Estimated Financial Requirments [mil. Of EUR]	Financial Sources	Maximum speed [km*h ⁻¹]	Axle load [t] / Line category	Maximum Train Lenght [m]	Traction power	ETCS Level	Track clearan ce	Interm. Code
Completed	Bulgaria	NRIC				"Rehabilitation of the Railway Infrastructure along Sections of Plovdiv - Burgas Railway Line – rehabilitation, repair and modernization of 3 traction sub-stations" Burgas, Karnobar, Yambol	Modernisation		1	2016	9	2017	8,00	OPTTI	n.a.	22,5 I Cat.	620	25 kv AC	L-1	1 CM-2	55/385	
Completed	Bulgaria	NRIC	Sofia - Mezdra - Varna			Principal line	"Modernisation of the Railway Section Kurilo - Rebrovo line 2"	Modernisation		7	2015	12	2016	10,00	State Budget	70	22,5 I Cat.	690	25 kv AC	n.a.	1 CM 1	55/385
Ongoing	Bulgaria	NRIC	Iliantsi - Karlovo - Zimnitsa - Karnobat - Sindel			Principal line	"Modernisation of the Railway Section Liuliakovo - Daskotna"	Modernisation		4	2017	3	2018	8,00	State Budget	120	22,5 I Cat.	650	25 kv AC	n.a.	1 CM-2	55/385
Completed	Bulgaria	NRIC	Sofia - Vladaya - Kulata			Principal line	"Modernisation of the Railway Section Batanovtsi - Radomir line 1"	Modernisation		7	2016	9	2017	4,00	State Budget	80	22,5 I Cat.	535	25 kv AC	n.a.	1 CM 1	55/385
Completed	Bulgaria	NRIC	Sofia - Vladaya - Kulata			Principal line	"Modernisation of the Railway Section Deljan - Djakovo"	Modernisation		6	2016	12	2016	2,00	Infrastruc ture Charges	70	22,5 I Cat.	535	25 kv AC	n.a.	1 CM 1	55/385
Completed	Bulgaria	NRIC	Ruse Marshaling Yard			Principal line	"Modernisation of the Railway Section Senovo - Prostorno"	Modernisation		6	2016	9	2017	6,00	Infrastruc ture Charges	95	22,5 I Cat.	630	25 kv AC	n.a.	1 CM-2	55/385
Planned	Bulgaria	NRIC	Stara Zagora - Dimitrovgrad	St. Zagora	Mihailovo	Diversiionary line															45/360	
Planned	Bulgaria	NRIC	Stara Zagora - Dimitrovgrad	Mihailovo	Dimitrovgrad	Diversiionary line															45/360	
Planned	Bulgaria	NRIC		Volujak	Sofia			Track reconstruction	Total closure on two-way consequently	10.12.2017		8.12.2018										
Planned	Bulgaria	NRIC		Sofia	Sofia			Renewal and Maintenance	Partial closure of track	10.12.2017		8.12.2018										
Planned	Bulgaria	NRIC		Sofia	Iskar			Track reconstruction	Total closure	10.12.2017		8.12.2018										
Planned	Bulgaria	NRIC		Iskar	Elin Pelin			Track reconstruction	Total closure on two-way consequently	10.12.2017		8.12.2018										
Planned	Bulgaria	NRIC		Verinsko	Septemvri			Track reconstruction	Total closure on two-way consequently	10.12.2017		8.12.2018										
Planned	Bulgaria	NRIC		Rebrovo	Svoqe			Track reconstruction	Total closure on one way	10.12.2017		8.12.2018										
Planned	Bulgaria	NRIC		Provadija	Sindel Razpredelitelna			Track reconstruction	Total closure on two-way consequently	8.5.2018		19.5.2018										
Planned	Bulgaria	NRIC		Skutare	Belozem			Renewal and Maintenance	Total closure for 8 hours	10.12.2017		26.4.2018										

6.1 RFC Orient/East-Med Project List

Status	Member state	IM	Line	Section		Category	Project name	Specification	Note	Start		End		Reached parameters								
				From	To					Estimated Financial Requirments [mil. Of EUR]	Financial Sources	Maximum speed [km*h ⁻¹]	Axle load [t] / Line category	Maximum Train Lenght [m]	Traction power	ETCS Level	Track clearan ce	Interm. Code				
																			Month	Year	Month	Year
Planned	Bulgaria	NRIC		Skutare	Belozem			Track reconstruction	Total closure	27.4.2018		27.6.2018										
Planned	Bulgaria	NRIC		Skutare	Belozem			Renewal and Maintenance	Total closure for 8 hours	28.6.2018		8.12.2018										
Planned	Bulgaria	NRIC		Jambol	Zimnica			Track reconstruction	Total closure	1.9.2018		15.10.2018										
Planned	Bulgaria	NRIC		Straldja	Cerkovski			Renewal and Maintenance	Total closure on two-way consequently	10.12.2017		8.12.2018										
Planned	Bulgaria	NRIC		Samuil	Visoka Poljana			Renewal and Maintenance	Total closure for 7 hours	10.12.2017		31.5.2018										
Planned	Bulgaria	NRIC		Hitrino	Kaspichan			Renewal and Maintenance	Total closure for 7 hours	1.6.2018		30.11.2018										
Planned	Bulgaria	NRIC		Turnak	Struja			Renewal and Maintenance	Total closure for 5 hours	1.11.2018		8.12.2018										
Planned	Bulgaria	NRIC		Junak	Sindel Razpredel itelna			Track reconstruction	Total closure	4.9.2018		6.9.2018										
Completed	Greece	OSE	Pireaus -Athens RS-3 Gefyres	Piraeus R.S.	Athens RS	Principal line	Infrastructure and superstructure upgrade, singalling and ERTMS installation, electrification, construction of the underground line section Athens RS-3Gefyres with 4 lines, R.Station upgrades, the subleveling of the triple rail corridor section of Redi S.S. to Athens	Phase A : Upgrading and electrification of certain railway lines in Athens R.S. and electrification of the existing double track railway line Pireaus-Athens RS		5	2005	6	2017	15	Regional Operational Program (ROP) Attica 2007-2013 and National Funds.		22,5 / D4	700	25 kV/50 Hz	n.a.	GC	70/400
Ongoing	Greece	OSE	Pireaus -Athens RS-3 Gefyres	Athens R.S.	3 Gefyres			Phase B: Completion of Athens R.S. upgrade, construction of the underground line section Athens RS-3 Gefyres with a 4 line-corridor.	Part of old phase B is being matured faster. So a new phase B is proposed.	12	2017	12	2022	135	na		22,5 / D4	700	25 kV/50 Hz	n.a.	GC	70/400

6.1 RFC Orient/East-Med Project List

Status	Member state	IM	Line	Section		Category	Project name	Specification	Note	Start		End		Reached parameters								
				From	To					Estimated Financial Requirments [mil. Of EUR]	Financial Sources	Maximum speed [km*h ⁻¹]	Axle load [t] / Line category	Maximum Train Lenght [m]	Traction power	ETCS Level	Track clearan ce	Interm. Code				
																			Month	Year	Month	Year
Planned	Greece	OSE	Pireaus -Athens RS-3 Gefyres	Piraeus R.S.	3 Gefyres			Phase C: Signalling and ERTMS installation and subleveling of the triple corridor section Redi S.S up to Athens	It's part of old phase B.	5	2019	12	2025	30	na		22,5 / D4	n.a.	25 kV/50 Hz	1	GC	70/400
Planned	Greece	OSE	3 Gefyres-SKA	3 Gefyres	SKA	Principal line	New double railway line, bypassing Acharnes Municipality	Infrastructure, superstructure , signalling and electrification of the deviation	Not included in the short or medium investment schedule for railway projects.	6	2023	12	2025	na	na		22,5 / D4	n.a.	25 kV/50 Hz	1	GC	70/400
Completed	Greece	OSE	SKA-Inoi			Principal line	Upgrading of the existing line and structures, ERTMS installation, Restitution of electrification	Restitution of the electrification and ERTMS installation		9	2006	12	2017	na (Part of Global Projects of 165 mil.€ in total)	EU Operational Programs and National Funds		n.a.	n.a.	25 kV/50 Hz	1	GC	45/375
Planned	Greece	OSE	SKA-Inoi					Upgrading of the existing line and structures		1	2020	7	2022	100	Operational Programme "Transport Infrastructures, Environment and Sustainable Development 2014-2020"		22,5 / D4	>740	n.a.	n.a.	GC	45/375
Completed	Greece	OSE	Inoi-Tithorea			Principal line	Restitution of electrification and ERTMS installation	Restitution of the electrification and ERTMS installation		9	2006	12	2017	na (Part of Global Projects of 165 mil.€ in total)	EU Operational Programs and National Funds	160-200 (max design speed)	n.a.	n.a.	25 kV/50 Hz	1	GC	45/375

6.1 RFC Orient/East-Med Project List

Status	Member state	IM	Line	Section		Category	Project name	Specification	Note	Start		End		Reached parameters								
				From	To					Month	Year	Month	Year	Estimated Financial Requirments [mil. Of EUR]	Financial Sources	Maximum speed [km*h ⁻¹]	Axle load [t] / Line category	Maximum Train Lenght [m]	Traction power	ETCS Level	Track clearan ce	Interm. Code
Ongoing	Greece	OSE	Tithorea-Lianokladi			Principal line	New double-track high speed railway line with electrification, ETCS level 1 and GSM-R	Reconstructio n, modernization of the line, under new alignment		10	1997	12	2018	1800	EU Operational Programs , CEF	160-200 (max design speed)	22,5 / D4	>740	25 kV/50 Hz	1	GC	45/375
Ongoing	Greece	OSE	Tithorea-Lianokladi					GSM-R installation		3	2018	6	2019				n.a.	n.a.	n.a.	n.a.	GC	45/375
Ongoing	Greece	OSE	Lianokladi-Domokos			Principal line	New double-track high speed railway line with electrificatio, ETCS level 1 and GSM-R	Reconstructio n, modernization of the line, under new alignment		12	2006	12	2018				22,5 / D4	>740	25 kV/50 Hz	1	GC	45/375
Ongoing	Greece	OSE	Lianokladi-Domokos					GSM-R installation		3	2018	6	2019				n.a.	n.a.	n.a.	n.a.	GC	45/375
Completed	Greece	OSE	Domokos-Thessaloniki			Principal line	ERTMS installation	ERTMS installation		9	2007	12	2017	na (Part of Global Project of 144 mil.€)	EU Operational Programs and National Funds	160-200 (max design speed)	n.a.	n.a.	n.a.	n.a.	GC	45/375
Completed	Greece	OSE	Thessaloniki-Strimonas-Promachonas (Kulata)			Principal line	Limited upgrade of the existing line, electrification and ERTMS installation	ERTMS installation		9	2007	12	2017	na (Part of Global Project of 144 mil.€)	EU Operational Programs and National Funds		n.a.	n.a.	n.a.	1	GC	45/375
Planned	Greece	OSE	Thessaloniki-Strimonas-Promachonas (Kulata)					Limited upgrade of the existing line and electrification		5	2020	11	2022	120	CEFNSR F Operational Program 2014 - 2020.		22,5 / D4	640	25 kV/50 Hz	n.a.	GC	45/375

6.2 ERTMS Deployment Plan

Table 1: ERTMS Deployment Plan

Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (‰)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Sande - Sanderbusch	2	single	Diesel	740	D4 22,5t 8,0t/m	bis 100 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Sanderbusch - Schortens Weißer Floh	2,7	single	Diesel	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Schortens Weißer Floh - Accum (Kr Friesland)	1,7	single	Diesel	740	D4 22,5t 8,0t/m	bis 100 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Accum (Kr Friesland) - Wilhelmshaven Ölweiche	9	single	Diesel	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Oldenburg (Oldb) Hbf - Ofenerdiek	5,6	double	Diesel	740	D4 22,5t 8,0t/m	bis 100 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Jaderberg - Varel (Oldb)	7,7	double	Diesel	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Varel (Oldb) - Sande	14,3	double	Diesel	740	D2 22,5t 6,4t/m	bis 120 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Hagen (Han) Hp - Hagen (Han)	0,6	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Wunstorf - Poggenhagen	5,5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Poggenhagen - Neustadt a Rübenberge	4,1	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Neustadt a Rübenberge - Eilvese	5,1	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Eilvese - Hagen (Han) Hp	3,5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Hagen (Han) - Linsburg	6,1	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Linsburg - Nienburg (Weser)	9	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Nienburg (Weser) - Rohrsen (b Nienburg)	5,9	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Rohrsen (b Nienburg) - Eystруп	9,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS

6.2 ERTMS Deployment Plan

Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (%)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Eystrup - Dörverden	7,2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Dörverden - Verden (Aller)	8,3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Verden (Aller) - Langwedel	7,2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Langwedel - Etelsen	5,4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Etelsen - Baden (Kr Verden)	3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Bremen Hbf - Bremen-Walle	2,9	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Bremen-Oslebshausen - Bremen-Burg	3,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Bremen-Burg - Ritterhude	4,6	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Baden (Kr Verden) - Achim	3,5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Lunestedt - Loxstedt	6,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Bremerhaven-Wulsdorf - Bremerhaven Hbf	3,2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Bremerhaven-Speckenbüttel - Bremerhaven Seehafen DB-Grenze	3,9	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Achim - Bremen-Mahndorf	6,2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Bremen-Sebaldsbrück - Bremen Hbf	5,6	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	< 20		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Ritterhude - Osterholz-Scharmbeck	5,3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Osterholz-Scharmbeck - Oldenbüttel	6,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Oldenbüttel - Lübberstedt	6,9	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS

6.2 ERTMS Deployment Plan

Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (%)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Lübbstedt - Stubben	7,1	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Stubben - Lunestedt	5,2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Bremen-Walle - Bremen Rbf Abzw	4,5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Bremen Rbf Abzw - Bremen-Oslebshausen	0,4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Vechelde - Groß Gleidingen	6,3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Peine - Vechelde	11,3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Vöhrum - Peine	4,9	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Hämelerwald - Vöhrum	4,5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Lehrte - Hämelerwald	9,7	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Braunschweig Gabelung - Braunschweig Hbf	3,3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Groß Gleidingen - Braunschweig Gabelung	4,9	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Hamburg-Harburg - Hamburg Unterelbe	1,4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Hamburg Unterelbe - Hamburg-Hausbruch	4,3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Bad Bevensen - Bienenbüttel	9,4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 200 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	L 72 CE (TgrV 0 und 1)	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Bienenbüttel - Deutsch Evern	7,3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 200 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	L 72 CE (TgrV 0 und 1)	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Deutsch Evern - Lüneburg	5,7	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 200 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	L 72 CE (TgrV 0 und 1)	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Lüneburg - Bardowick	5,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 200 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	L 72 CE (TgrV 0 und 1)	no ETCS

6.2 ERTMS Deployment Plan

Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (‰)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Bardowick - Radbruch	6,2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 200 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	L 72 CE (TgrV 0 und 1)	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Radbruch - Winsen (Luhe)	7	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 200 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	L 72 CE (TgrV 0 und 1)	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Uelzen - Bad Bevensen	12,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 200 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	L 72 CE (TgrV 0 und 1)	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Ahlem - Hannover-Linden Hafen	3,3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Seelze Mitte - Ahlem	4,3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	< 20		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Hannover-Linden - Hannover-Waldhausen	3,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Hannover-Linden Hafen - Hannover-Linden	3,7	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Wunstorf - Gümmerwald	4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Misburg - Lehrte	8,7	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Gümmerwald - Dedensen-Gümmer	0,9	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Hannover-Waldhausen - Hannover-Waldheim	1,1	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Hannover-Waldheim - Misburg	6,9	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Frellstedt - Helmstedt	7,4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	< 20		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Königsutter - Frellstedt	8,4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Schandelah - Königsutter	9,2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Weddel (Braunsch) - Weddel (Abzw)	0,5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Braunschweig Hbf - Braunschweig Schmiedekamp	2,3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	10 to < 15		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS

6.2 ERTMS Deployment Plan

Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (‰)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Braunschweig-Buchhorst - Weddel (Braunschw)	2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Braunschweig Schmiedekamp - Braunschweig-Buchhorst	1,9	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Weddel (Abzw) - Schandelah	3,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Rostock - Berlin - Dresden	Principal line	Berlin-Karow Ost - Karower Kreuz Streckenwechsel 6067/6087	0,5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned
Germany	Rostock - Berlin - Dresden	Principal line	Berlin-Hohenschönhausen - Berlin-Karow Ost	4,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned
Germany	Rostock - Berlin - Dresden	Principal line	Biesdorfer Kreuz Nord Strw 6067/6080 - Berlin-Hohenschönhausen	2,7	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned
Germany	Rostock - Berlin - Dresden	Principal line	Biesdorfer Kreuz Mitte - Biesdorfer Kreuz Nord	1,7	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned
Germany	Rostock - Berlin - Dresden	Principal line	Berlin Eichgestell - Eichgestell Nord	1,5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	10 to < 15		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned
Germany	Rostock - Berlin - Dresden	Principal line	Biesdorfer Kreuz Nord - Biesdorfer Kreuz Nord Strw 6067/6080	2,1	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned
Germany	Rostock - Berlin - Dresden	Principal line	Eichgestell Nord - Biesdorfer Kreuz Süd	3,5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned
Germany	Rostock - Berlin - Dresden	Principal line	Biesdorfer Kreuz Süd - Biesdorfer Kreuz Mitte	1,3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	10 to < 15		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned
Germany	Rostock - Berlin - Dresden	Principal line	Birkenwerder (b Berlin) - Schönfließ West	2,6	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned
Germany	Rostock - Berlin - Dresden	Principal line	Berlin-Karow West - Schönfließ	9,7	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned

6.2 ERTMS Deployment Plan

Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (%)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Germany	Rostock - Berlin - Dresden	Principal line	Schönfließ - Schönfließ West	1,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned
Germany	Rostock - Berlin - Dresden	Principal line	Karower Kreuz Streckenwechsel 6067/6087 - Berlin-Karow West	1,4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned
Germany	Rostock - Berlin - Dresden	Principal line	Borgsdorf - Oranienburg	4,9	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned
Germany	Rostock - Berlin - Dresden	Principal line	Birkenwerder (b Berlin) - Borgsdorf	2,9	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned
Germany	Rostock - Berlin - Dresden	Principal line	Oranienburg - Sachsenhausen (Nordb)	2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned
Germany	Rostock - Berlin - Dresden	Principal line	Sachsenhausen (Nordb) - Nassenheide	5,3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned
Germany	Rostock - Berlin - Dresden	Principal line	Dannenwalde - Fürstenberg (Havel)	12,6	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Fürstenberg (Havel) - Neustrelitz Hbf	20,5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Nassenheide - Grüneberg	5,9	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Grüneberg - Löwenberg (Mark)	3,6	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Löwenberg (Mark) - Gransee	11,9	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Gransee - Dannenwalde	9,3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Hohen Neuendorf Strw 6088/6090/6092 - Schönfließ West	3	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned

6.2 ERTMS Deployment Plan

Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (%)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Magdeburg Hbf - Magdeburg-Sudenburg	2,9	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	< 20		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Magdeburg-Neustadt - Magdeburg Hbf	2,3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	< 20		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Brücke - Magdeburg-Neustadt	1,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Biederitz - Magdeburg-Herrenkrug	3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Magdeburg-Sudenburg - Niederndodeleben	6,5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Niederndodeleben - Wellen (b Magdeburg)	5,1	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Wellen (b Magdeburg) - Ochtmersleben	3,7	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Ochtmersleben - Dreileben-Drackenstein	2,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Dreileben-Drackenstein - Ovelgünne	5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Ovelgünne - Eilsleben (b Magdeburg)	3,9	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Magdeburg-Herrenkrug - Brücke	1	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Röderau - Zeithain Bogendreieck	1,1	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Falkenberg (Elster) - Neuburxdorf	14,2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Rostock - Berlin - Dresden	Principal line	Blankenfelde (Kr Teltow-Fläming) - Dahlewitz	1,1	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Dahlewitz - Rangsdorf	3,6	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	ETCS L 2 under construction

6.2 ERTMS Deployment Plan

Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (%)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Germany	Rostock - Berlin - Dresden	Principal line	Rangsdorf - Dabendorf	6,4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Dabendorf - Zossen	2,1	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Zossen - Wünsdorf-Waldstadt	6,3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Wünsdorf-Waldstadt - Neuhoof (b Zossen)	3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Drahnsdorf - Luckau-Uckro	7,4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Golßen (Niederlausitz) - Drahnsdorf	6,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Klasdorf Glashütte - Golßen (Niederlausitz)	5,7	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Baruth (Mark) - Klasdorf Glashütte	4,7	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Neuhoof (b Zossen) - Baruth (Mark)	9,4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Elsterwerda - Elsterwerda Streckenwechsel 6135/6248	1,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Hohenleipisch - Elsterwerda	6,2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Rückersdorf (Niederl) - Hohenleipisch	7,6	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Walddrehna - Brenitz-Sonnenwalde	8,1	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction

6.2 ERTMS Deployment Plan

Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (‰)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Germany	Rostock - Berlin - Dresden	Principal line	Luckau-Uckro - Walddrehna	9,5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Doberlug-Kirchhain ob Bf - Rückersdorf (Niederl)	6	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Glasower Damm Süd - Blankenfelde (Kr Teltow-Fläming)	0,6	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned
Germany	Rostock - Berlin - Dresden	Principal line	Grünauer Kreuz Nord - Berlin Wendenheide	2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned
Germany	Rostock - Berlin - Dresden	Principal line	Berlin Wendenheide - Berlin Eichgestell	1,4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned
Germany	Rostock - Berlin - Dresden	Principal line	Schönefeld - Grünauer Kreuz Süd	4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned
Germany	Rostock - Berlin - Dresden	Principal line	Grünauer Kreuz Süd - Grünauer Kreuz Nord	1,2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned
Germany	Rostock - Berlin - Dresden	Principal line	Glasower Damm Ost - Glasower Damm Süd	2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Lutherstadt Wittenberg Hbf - Lutherstadt Wittenberg Altstadt	1,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Falkenberg (Elster) - Fernerswalde	8,6	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Annaburg - Jessen (Elster)	9	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Fernerswalde - Annaburg	13,6	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Lutherstadt Wittenberg-Labetz - Lutherstadt Wittenberg Hbf	2,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Jessen (Elster) - Elster (Elbe)	9,9	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS

6.2 ERTMS Deployment Plan

Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (%)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Mühlanger - Lutherstadt Wittenberg-Labetz	4,1	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Elster (Elbe) - Mühlanger	6,1	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Klieken - Roßlau (Elbe) Abzw Anst Aw	6,6	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Coswig (Anh) Gbf - Klieken	5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Coswig (Anh) Hp - Coswig (Anh) Gbf	1	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Griebo - Coswig (Anh) Hp	4,6	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Schöna - Schmilka-Hirschmühle	1,7	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Schmilka-Hirschmühle - Bad Schandau Ost	4,5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Bad Schandau Ost - Krippen	1,1	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Krippen - Bad Schandau	1,6	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Kurort Rathen (Kr Pirna) - Stadt Wehlen (Sachs)	3,2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Stadt Wehlen (Sachs) - Obervogelgesang (Kr Pirna)	3,6	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Obervogelgesang (Kr Pirna) - Pirna	4,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Pirna - Heidenau	5,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Heidenau - Dresden-Niedersedlitz Güteranlage (DHD)	2,6	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Dresden Hbf - Dresden Freiburger Straße	1,3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	10 to < 15		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS

6.2 ERTMS Deployment Plan

Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (%)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Dresden Mitte - Dresden-Neustadt	1,3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Bad Schandau Grenze - Schöna	2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Dresden Freiburger Straße - Dresden Mitte	0,9	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	10 to < 15		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Rostock - Berlin - Dresden	Principal line	Dresden-Friedrichstadt - Dresden Freiburger Straße	0,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Dresden Hbf - Dresden Freiburger Straße	1,3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	10 to < 15		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Dresden Mitte - Dresden-Neustadt	1,6	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Dresden Freiburger Straße - Dresden Mitte	0,9	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	10 to < 15		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Radebeul-Naundorf (Abzw) - Coswig (bei Dresden)	2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Rostock - Berlin - Dresden	Principal line	Großenhain Berl Bf - Großenhain Cottb Bf	1,7	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 50 km/h	< 20		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned
Germany	Rostock - Berlin - Dresden	Principal line	Großenhain Cottb Bf - Priestewitz	4,8	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned
Germany	Rostock - Berlin - Dresden	Principal line	Frauenhain - Prösen-Wainsdorf / Prösen Ost	4,7	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Dresden-Friedrichstadt - Dresden-Cotta (Bstg)	2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	10 to < 15		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Dresden-Kemnitz - Dresden-Stetzsch	1,4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 50 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Dresden-Stetzsch - Cossebaude	1,5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction

6.2 ERTMS Deployment Plan

Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (‰)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Germany	Rostock - Berlin - Dresden	Principal line	Cossebaude - Niederwartha	2,2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Niederwartha - Radebeul-Naundorf	1,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Radebeul-Naundorf (Abzw) - Radebeul Abzw Az	1,1	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Großenhain Berl Bf - Zabeltitz	5,9	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Zabeltitz - Frauenhain	4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Prösen-Wainsdorf / Prösen Ost - Elsterwerda Streckenwechsel 6135/6248	2,2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Dresden-Cotta (Bstg) - Dresden-Kemnitz	1,7	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Radebeul-Naundorf - Radebeul-Naundorf (Abzw)	0,2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Kottewitz - Großenhain Berl Bf	5,6	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Grabowhöfe - Vollrathsrue	11,4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Langhagen - Lalendorf Ost	7,6	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Lalendorf Ost - Plaaz	12,5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Kronskamp - Scharstorf	6,2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	ETCS L 2 under construction

6.2 ERTMS Deployment Plan

Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (%)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Germany	Rostock - Berlin - Dresden	Principal line	Plaaz - Subzin-Liessow	4,2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Subzin-Liessow - Laage (Meckl)	4,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Laage (Meckl) - Krons kamp	2,4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Scharstorf - Kavelstorf	5,2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Kargow - Waren (Müritz)	6,1	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Waren (Müritz) - Grabowhöfe	8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	10 to < 15		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Vollrathsruhe - Langhagen	6,4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Niederau - Weinböhla Haltepunkt	1,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Priestewitz - Niederau	11,1	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Weißig (b Großenhain) - Leckwitz	2,4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Glaubitz (b Riesa) - Nünchritz	2,5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Zeithain Bogendreieck - Glaubitz (b Riesa)	2,7	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Weinböhla Haltepunkt - Coswig (bei Dresden)	4,3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Nünchritz - Weißig (b Großenhain)	2,7	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Leckwitz - Priestewitz	4,9	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS

6.2 ERTMS Deployment Plan

Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (%)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Biederitz - Königsborn	3,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Güterglück - Trebnitz Streckenwechsel 6410/6411	3,4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Wahlitz - Gommern	5,2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Gommern - Prödel	6,5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Prödel - Lübs (b Magdeburg)	2,5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Lübs (b Magdeburg) - Güterglück	4,6	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Königsborn - Wahlitz	3,6	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Trebnitz Streckenwechsel 6410/6411 - Zerbst/Anhalt	4,9	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Eilsleben (b Magdeburg) - Wefensleben	5,2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Wefensleben - Marienborn	3,3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Marienborn - Helmstedt	9,3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Glindenberg - Barleber See	1,5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Barleber See - Wolmirstedt	4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Wolmirstedt - Zielitz Ort	5,1	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Zielitz - Angern-Rogätz	7,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Angern-Rogätz - Mahlwinkel	6,5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Mahlwinkel - Tangerhütte	5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Tangerhütte - Demker	9,5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Demker - Stendal	9,4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS

6.2 ERTMS Deployment Plan

Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (%)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Zielitz Ort - Zielitz	0,9	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Roßlau (Elbe) Abzw Anst Aw - Roßlau (Elbe) Gbf	1,1	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 50 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Magdeburg-Rothensee - Glindenberg	3,4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Brücke - Magdeburg-Rothensee	2,4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 50 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Rostock - Berlin - Dresden	Principal line	Kavelstorf - Rostock Seehafen Süd	11,8	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 being planned
Germany	Rostock - Berlin - Dresden	Principal line	Rostock Seehafen Süd - Rostock Seehafen	1,9	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned
Germany	Rostock - Berlin - Dresden	Principal line	Rostock Seehafen - Rostock-Toitenwinkel	1,2	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Rostock - Berlin - Dresden	Principal line	Rostock Seehafen Süd - Rostock Hinrichsdorfer Straße	1,3	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Rostock - Berlin - Dresden	Principal line	Rostock-Toitenwinkel - Rostock Seehafen Bw	0,9	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Rostock - Berlin - Dresden	Principal line	Rostock Seehafen Bw - Rostock Seehafen Nord	2	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Rostock - Berlin - Dresden	Principal line	Rostock Hinrichsdorfer Straße - Rostock Seehafen	0,2	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Rostock - Berlin - Dresden	Principal line	Rostock-Dierkow - Rostock Seehafen Süd	0,4	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Schnega - Soltendieck	9,8	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Soltendieck - Wieren	7,6	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS

6.2 ERTMS Deployment Plan

Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (%)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Wieren - Stederdorf (Kr Uelzen)	4,6	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Stendal - Steinfeld (b Stendal)	9,1	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Steinfeld (b Stendal) - Kläden (Kr Stendal)	6,2	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Kläden (Kr Stendal) - Hohenwulsch	4,7	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Hohenwulsch - Meßdorf	5,8	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Meßdorf - Brunau-Packebusch	6,3	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Brunau-Packebusch - Fleetmark	8,5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Pretzier (Altm) - Salzwedel	7,4	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Salzwedel - Schnega	19,2	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Hamburg-Harburg - Hamburg-Südereibbrücke	2,7	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Maschen Rbf - Hamburg-Harburg	4,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Hamburg Südereibbrücke - Hamburg-Wilhelmsburg	2,1	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Stelle - Maschen Rbf	2,9	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Stelle - Maschen Rbf	3,7	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	15 to < 20		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Maschen Rbf - Hamburg-Harburg	7,7	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Bookholzberg - Schierbrok	3,6	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Hude - Bookholzberg	5,1	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Bremen-Neustadt - Bremen Hbf	2,6	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS

6.2 ERTMS Deployment Plan

Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (%)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Delmenhorst Heidkrug - Bremen-Neustadt	7,7	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Delmenhorst - Delmenhorst Heidkrug	3,4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Schierbrok - Hoykenkamp	2,1	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Hoykenkamp - Delmenhorst	3,2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Oldenburg-Hemmelsberg - Wüstring	5,9	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Wüstring - Hude	8,5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Oldenburg (Oldb) Hbf - Oldenburg-Hemmelsberg	2,3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Bremerhaven Hbf - Bremerhaven-Lehe Pbf	3,5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Bremerhaven-Lehe Pbf - Bremerhaven-Speckenbüttel	3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Bremen-Mahndorf - Bremen-Sebaldsbrück	4,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	< 20		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Fleetmark - Rademin	4,5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Rademin - Pretzier (Altm)	4,7	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Dresden-Niedersedlitz Güteranlage (DHD) - Dresden-Reick Abstellbahnhof	4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Dresden-Reick Abstellbahnhof - Dresden Hbf	4,7	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Rostock - Berlin - Dresden	Principal line	Brenitz-Sonnenwalde - Doberlug-Kirchhain ob Bf	9,2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction

6.2 ERTMS Deployment Plan

Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (%)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Germany	Rostock - Berlin - Dresden	Principal line	Glasower Damm Ost - Selchow West	2,3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned
Germany	Rostock - Berlin - Dresden	Principal line	Selchow West - Schönefeld	5,4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Wilhelmshaven West - Wilhelmshaven	2	double	Diesel	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Sande - Wilhelmshaven West	5,3	double	Diesel	740	D4 22,5t 8,0t/m	bis 100 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Rostock - Berlin - Dresden	Principal line	Radebeul Abzw Az - Weinböhla	5,5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Weinböhla - Kottewitz	10,4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Ashausen - Stelle	3	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Ashausen - Stelle	3,3	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	10 to < 15		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Rostock - Berlin - Dresden	Principal line	Neustrelitz Hbf - Kratzeburg	14,3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Hamburg-Wilhelmsburg - Hamburg Süd DB-Grenze	2,1	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Rastede - Jaderberg	10,8	double	Diesel	740	D4 22,5t 8,0t/m	bis 120 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Bardowick Hp - Radbruch	6,1	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Lüneburg - Bardowick Hp	4,5	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Ashausen Abzw - Stelle	3,4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 200 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	L72	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Winsen (Luhe) - Ashausen Abzw	4,2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 200 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	L72	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Rodleben - Roßlau (Elbe)	3,2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Rodleben - Roßlau (Elbe) Gbf	1,2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	< 20		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS

6.2 ERTMS Deployment Plan

Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (%)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Veerßen - Uelzen	3	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Stederdorf (Kr Uelzen) - Veerßen	5,8	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Ashausen Abzw - Ashausen	0,1	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Winsen (Luhe) - Ashausen	4,3	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Zerbst/Anhalt - Rodleben	9,9	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Dedensen-Gümmer - Seelze Mitte	6,6	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Wilhelmshaven Ölweiche - Wilhelmshaven JadeWeserPort	5,1	-	-	740	-	-	-		-		-	-	-	-	-
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Ofenerdiek - Rastede	6,6	double	Diesel	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Wilhelmshaven/Bremerhaven - Magdeburg (Biederitz)	Principal line	Loxstedt - Bremerhaven-Wulsdorf	4,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Bad Schandau - Königstein (Sächs Schweiz) Hp	4,9	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Rostock - Berlin - Dresden	Principal line	Kratzeburg - Kargow	14,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 2 under construction
Germany	Rostock - Berlin - Dresden	Principal line	Radebeul Abzw Az - Radebeul Nord	2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Radebeul Nord - Radebeul Ost	4,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Coswig (bei Dresden) - Radebeul Nord	2,8	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Hamburg - Magdeburg (Biederitz)	Principal line	Radbruch - Winsen (Luhe)	7	single	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Königstein (Sächs Schweiz) Üst - Kurort Rathen (Kr Pirna)	2,7	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS

6.2 ERTMS Deployment Plan

Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (‰)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Königstein (Sächs Schweiz) Hp - Königstein (Sächs Schweiz) Üst	3,5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Neuburxdorf - Röderau	15,2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Dresden-Pieschen (Abzw) - Dresden-Neustadt	3,1	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	< 20		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Radebeul Ost - Dresden-Pieschen (Abzw)	3,4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 160 km/h	< 20		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Lutherstadt Wittenberg-Piesteritz Werkb - Griebo	3,8	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Lutherstadt Wittenberg-Piesteritz - Lutherstadt Wittenberg-Piesteritz Werkb	2,2	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	0 to < 5		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	no ETCS
Germany	Magdeburg (Biederitz) - CZ Grenze	Principal line	Lutherstadt Wittenberg Altstadt - Lutherstadt Wittenberg-Piesteritz	2,4	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 100 km/h	5 to < 10		P/C 410 (P/C 80)		on request	GSM-R	with PZB	no LZB	no ETCS
Germany	Rostock - Berlin - Dresden	Principal line	Hohen Neuendorf Strw 6088/6090/6092 - Birkenwerder (b Berlin)	2,5	double	AC 15 kV 16,7 Hz	740	D4 22,5t 8,0t/m	bis 120 km/h	5 to < 10		P/C 410 (P/C 80)		GA	GSM-R	with PZB	no LZB	ETCS L 1/2 being planned
Czech Republic	Praha Libeň - Praha Holešovice	Principal line	Praha Libeň - Praha Holešovice	5	2	3 kV/ DC	660	D4	80	<= 12,5‰	<= 12,5‰	P/C 402 (P/C 78)	GC	n.a.	GSM-R			no
Czech Republic	Praha Holešovice - Praha Bubeneč	Principal line	Praha Holešovice - Praha Bubeneč	2	2	3 kV/ DC	660	D4	120	<= 12,5‰	<= 12,5‰	P/C 402 (P/C 78)	GC	n.a.	GSM-R			no
Czech Republic	Praha Bubeneč - Kralupy nad Vltavou	Principal line	Praha Bubeneč - Kralupy nad Vltavou	22	2	3 kV/ DC	625	D4	120	<= 12,5‰	<= 12,5‰	P/C 402 (P/C 78)	GC	n.a.	GSM-R			no
Czech Republic	Kralupy nad Vltavou - Nelahozeves	Principal line	Kralupy nad Vltavou - Nelahozeves	5	2	3 kV/ DC	595	D4	120	<= 12,5‰	<= 12,5‰	P/C 360 (P/C 47)	G2	n.a.	GSM-R			no
Czech Republic	Nelahozeves - Lovosice	Principal line	Nelahozeves - Lovosice	52	2	3 kV/ DC	595	D4	120	<= 12,5‰	<= 12,5‰	P/C 402 (P/C 78)	GC	n.a.	GSM-R			no

6.2 ERTMS Deployment Plan

Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (%)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Czech Republic	Lovosice - Děčín hl.n.	Principal line	Lovosice - Děčín hl.n.	45	2	3 kV/ DC	595	D4	120	<= 12,5‰	<= 12,5‰	P/C 410 (P/C 80)	GC	n.a.	GSM-R			no
Czech Republic	Děčín hl.n. - Děčín Prostřední Žleb	Principal line	Děčín hl.n. - Děčín Prostřední Žleb	3	2	3 kV/ DC	650	D4	120	<= 12,5‰	<= 12,5‰	P/C 410 (P/C 80)	G2	n.a.	GSM-R			no
Czech Republic	Děčín Prostřední Žleb - state border Germany	Principal line	Děčín Prostřední Žleb - state border Germany	8	2	3 kV/ DC	650	D4	120	<= 12,5‰	<= 12,5‰	P/C 410 (P/C 80)	GC	n.a.	GSM-R			no
Czech Republic	Lysá nad Labem - Ústí n/L Střekov	Principal line	Lysá nad Labem - Ústí n/L Střekov	94	2	3 kV/ DC	585	D4	120	<= 12,5‰	<= 12,5‰	P/C 410 (P/C 80)	GC	n.a.	GSM-R			no
Czech Republic	Ústí n/L Střekov - Děčín východ d.n.	Principal line	Ústí n/L Střekov - Děčín východ d.n.	26	2	3 kV/ DC	600	D4	80	<= 12,5‰	<= 12,5‰	P/C 391 (P/C 67)	G2	n.a.	GSM-R			no
Czech Republic	Děčín východ d.n. - Děčín Prostřední Žleb	Principal line	Děčín východ d.n. - Děčín Prostřední Žleb	3	1	3 kV/ DC	650	D4	50	<= 12,5‰	<= 12,5‰	P/C 402 (P/C 78)	GC	n.a.	GSM-R			no
Czech Republic	Nymburk - Kolín	Principal line	Nymburk hl.n. - Kolín	25	2	3 kV DC	600	D4	120	4	3	80/410	GC	n.a.	GSM-R			n.a.
Czech Republic	Lysá nad Labem - Nymburk	Principal line	Mělník - Nymburk	15	2	3 kV DC	600	D4	120	5	10	80/410	GČD	n.a.	GSM-R			n.a.
Czech Republic	Praha - Kolín	Principal line	Praha-Libeň - Poříčany	33	3	3 kV DC	700	D4	120/140	7	7	80/410	GČD	n.a.	GSM-R	Yes	Yes	n.a.
Czech Republic	Praha - Kolín	Principal line	Poříčany - Kolín	23	2	3 kV DC	650	D4	160	4	4	80/410	GČD	n.a.	GSM-R	Yes	Yes	n.a.
Czech Republic	Kolín - Pardubice	Principal line	Kolín - Pardubice	42	2	3 kV DC	650	D4	160	4	4	80/402	GC	n.a.	GSM-R	Yes	Yes	L2
Czech Republic	Pardubice - Česká Třebová	Principal line	Pardubice - Česká Třebová	60	2	3 kV DC	650	D4	100/160	8	2	80/410	GČD	n.a.	GSM-R	Yes	Yes	L2
Czech Republic	Česká Třebová - Brno	Principal line	Česká Třebová - Svitavy	17	2	3 kV DC	600	D4	120/140	7	7	80/410	GC	n.a.	GSM-R	Yes	Yes	L2
Czech Republic	Česká Třebová - Brno	Principal line	Svitavy - Brno hl. n.	74	2	25 kV AC / 50 Hz	650	D4	80/120	5	0	80/410	GČD	n.a.	GSM-R	Yes	Yes	L2
Czech Republic	Brno - Břeclav	Principal line	Brno hl.n. - Břeclav	60	2	25 kV AC / 50 Hz	650	D4	120/160	3	2	80/410	GČD	n.a.	GSM-R	Yes	Yes	L2
Czech Republic	Břeclav - Lanžhot	Principal line	Břeclav - Lanžhot	12	2	25 kV AC / 50 Hz	670	D3	160	5	5	80/410	GC	n.a.	GSM-R	Yes	Yes	L2
Czech Republic	Kolín - Kutná Hora	Diversionary line	Kolín - Kutná Hora	11	2	3 kV DC	600	D4	120	8	1	57/381	GC	n.a.	n.a.	Yes	Yes	n.a.
Czech Republic	Kutná Hora - Havlíčkův Brod	Diversionary line	Kutná Hora - Havlíčkův Brod	63	2	25 kV AC / 50 Hz	600	D4	120	11	10	57/381	GC	n.a.	n.a.	Yes	Yes	n.a.
Czech Republic	Havlíčkův Brod - Brno	Diversionary line	Havlíčkův Brod - Křižanov	58	2	25 kV AC / 50 Hz	600	D4	110	9	8	57/381	GC	n.a.	n.a.	Yes	Yes	n.a.
Czech Republic	Havlíčkův Brod - Brno	Diversionary line	Křižanov - Brno	63	2	25 kV AC / 50 Hz	600	D4	110	17	13	57/381	GČD	n.a.	n.a.	Yes	Yes	n.a.
Czech Republic	Petrovice - Ostrava	Connecting line	Petrovice u K. - Ostrava	22	2	3 kV DC	690	D4	120/160	4	0	80/410	GC	n.a.	GSM-R			n.a.

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Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (%)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Czech Republic	Ostrava - Hranice	Connecting line	Ostrava - Hranice na Moravě	55	2	3 kV DC	690	D4	160	4	4	80/410	GC	n.a.	GSM-R			n.a.
Czech Republic	Hranice - Přerov	Connecting line	Hranice na Moravě - Přerov	19	2	3 kV DC	690	D4	160	4	4	80/410	GC	n.a.	GSM-R			n.a.
Czech Republic	Přerov - Břeclav	Connecting line	Přerov - Nedakonice	51	2	3 kV DC	700	D4	160	4	4	80/410	GC	n.a.	GSM-R			n.a.
Czech Republic	Přerov - Břeclav	Connecting line	Nedakonice - Břeclav	47	2	25 kV AC / 50 Hz	700	D4	160	4	4	80/410	GC	n.a.	GSM-R			n.a.
Czech Republic	Děčín - Lovosice	Connecting line	Děčín hl.n. - Lovosice	45	2	3 kV DC	600	D4	120/140	1	2	80/410	GC	n.a.	GSM-R			n.a.
Austria	Břeclav - Wien	Principal line	Břeclav pred - Gänserndorf	53,4	2	~15 kV/16,7 Hz	650	D4	140	28	0	70/400	GC	n.a.	GSM-R	YES	YES	L2
Austria	Břeclav - Wien	Principal line	Gänserndorf - Wien Zvbf	36,9	2	~15 kV/16,7 Hz	650	D4	140	11	0	70/400	GC	n.a.	GSM-R	YES	YES	L2
Austria	Wien Zvbf - Hegyeshalom	Principal line	Wien Zvbf - Hegyeshalom	66,5	2	~15 kV/16,7 Hz	650	D4	140	8	0	70/400	GC	n.a.	GSM-R	YES		n.a.
Austria	Wien Zvbf - Ebenfurth	Principal line	Wien Zvbf - Wampersdorf	34,4	1	~15 kV/16,7 Hz	650	D4	120	15	0	70/400	GC	n.a.	GSM-R	YES		n.a.
Austria	Wien Zvbf - Ebenfurth	Principal line	Wampersdorf - Ebenfurth	7,3	2	~15 kV/16,7 Hz	650	D4	140	6	0	70/400	GC	n.a.	GSM-R	YES		n.a.
Austria	Ebenfurth - Sopron	Principal line	Ebenfurth - Sopron	33	1	~25 kV/50 Hz	650	D4	120	15	0	70/400	GC	n.a.	n.a.			n.a.
Austria	Gänserndorf - Devínska Nová V	Diversorary line	Gänserndorf - Marchegg	18	1	Non-electrified	650	D4	100	0	16	70/400	GC	n.a.	GSM-R	YES		n.a.
Austria	Gänserndorf - Devínska Nová V	Diversorary line	Marchegg - Devínska Nová V	3,7	1	Non-electrified	700	D4	80	8	0	70/400	GC	n.a.	GSM-R	YES		n.a.
Austria	Parndorf - Bratislava	Diversorary line	Parndorf - Kittsee	20	1	~15 kV/16,7 Hz	650	D4	160	0	13	70/400	GC	n.a.	GSM-R	YES		n.a.
Austria	Parndorf - Bratislava	Diversorary line	Kittsee - Petržalka	2,4	1	~15 kV/16,7 Hz	540	D4	140	0	0	70/400	GC	n.a.	GSM-R	YES		n.a.
Austria	Wien Zvbf. - Wiener Neustadt	Diversorary line	Wien Zvbf - Wiener Neustadt	45	2	~15 kV/16,7 Hz	650	D4	160	0	10	70/400	GC	n.a.	GSM-R	YES		n.a.
Austria	Gramatneusiedl - Wampersdorf	Diversorary line	Gramatneusiedl - Wampersdorf	14	1	~15 kV/16,7 Hz	650	D4	120	6	0	70/400	GC	n.a.	GSM-R	YES		n.a.
Austria	Ebenfurth - Wiener Neustadt	Diversorary line	Ebenfurth - Wiener Neustadt	13	2	~15 kV/16,7 Hz	650	D4	140	15	0	70/400	GC	n.a.	GSM-R	YES		n.a.
Austria	Wiener Neustadt - Sopron	Diversorary line	Wiener Neustadt - Sopron	30	1	Non-electrified	650	D4	120	15	0	70/400	GC	n.a.	n.a.			n.a.
Slovakia	Lanzhot - Kúty	Principal line	Lanzhot - Kúty	6,9	2	25 kV AC / 50 Hz	700	D3	120	5	5	70/400	GB	n.a.	n.a.	No	No	n.a.
Slovakia	Kúty - Bratislava	Principal line	Kúty - Devínska Nová V	51	2	25 kV AC / 50 Hz	700	D3	140	7	5	70/400	GB	n.a.	n.a.	No	No	n.a.

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Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (%)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Slovakia	Kúty - Bratislava	Principal line	Devínska Nová V - Bratislava hl st	12,8	2	25 kV AC / 50 Hz	700	D4	120	8	8	70/400	GB	n.a.	GSM-R	Yes	Yes	n.a.
Slovakia	Bratislava - Nové Zámky	Principal line	Bratislava hl st - Galanta	49	2	25 kV AC / 50 Hz	700	D4	120	4	8	70/400	GB	n.a.	n.a.	Yes	Yes	n.a.
Slovakia	Bratislava - Nové Zámky	Principal line	Galanta - Nové Zámky	42	2	25 kV AC / 50 Hz	700	D4	120	4	4	70/400	GB	n.a.	n.a.	Yes	Yes	n.a.
Slovakia	Nové Zámky - Szob	Principal line	Nové Zámky - Stúrovo	58	2	25 kV AC / 50 Hz	700	D4	120	3	3	70/400	GB	n.a.	n.a.	No	No	n.a.
Slovakia	Nové Zámky - Szob	Principal line	Stúrovo - Szob	13,8	2	25 kV AC / 50 Hz	700	D4	120	1	4	70/400	GB	n.a.	n.a.	No	No	n.a.
Slovakia	Nové Zámky - Komárom	Principal line	Nové Zámky - Komárom	33,4	1	25 kV AC / 50 Hz	620	D4	100	8	4	70/400	GB	n.a.	n.a.	No	No	n.a.
Slovakia	Bratislava - Rajka	Principal line	Bratislava hl st - Rajka	23	1	25 kV AC / 50 Hz	690	D4	80	8	11	70/400	GB	n.a.	GSM-R	Yes	Yes	n.a.
Slovakia	Bratislava - Komárno	Connecting line	Bratislava - Dunajská Streda	38,9	1	Non-electrified	625	C4	80	5	5	70/400	GB	n.a.	n.a.	No	No	n.a.
Slovakia	Bratislava - Komárno	Connecting line	Dunajská Streda - Komárno	53,1	1	Non-electrified	240	D4	80	4	3	70/400	GB	n.a.	n.a.	No	No	n.a.
Slovakia	Kúty - Galanta	Diversionary line	Kúty - Trnava	69	1	25 kV AC / 50 Hz	720	D4	80	10	10	70/400	GB	n.a.	n.a.	No	No	n.a.
Slovakia	Kúty - Galanta	Diversionary line	Trnava - Galanta	26,7	1	25 kV AC / 50 Hz	670	D4	80	5	5	70/400	GB	n.a.	n.a.	No	No	n.a.
Slovakia	Trnava - Bratislava	Diversionary line	Trnava - Bratislava východ	40,7	2	25 kV AC / 50 Hz	650	D4	160	6	7	70/400	GC	n.a.	ETCS	Yes	Yes	L1
Slovakia	Devínska Nová Ves - Marchegg	Diversionary line	Devínska Nová V - Marchegg	3,7	1	Non-electrified	700	D4	80	7	0	70/400	GC	n.a.	GSM-R	Yes	Yes	n.a.
Slovakia	Bratislava Petržalka - Kittsee	Diversionary line	Bratislava Petržalka - Kittsee	2,4	1	AC 15 kV 16,7 Hz	690	D4	140	0	0	70/400	GC	n.a.	GSM-R	Yes	Yes	n.a.
Hungary	Rajka oh - Ferencváros	Principal line	Rajka - Hegyeshalom	15,7	1	25 kV AC / 50 Hz	750	C3	100	2	4	70/400	GA	G2	n.a.	Yes	Yes	ETCS L1
Hungary	Rajka oh - Ferencváros	Principal line	Hegyeshalom - Győr	46,5	2	25 kV AC / 50 Hz	750	C3	160	5	3	80/410	GA	G2	n.a.	Yes	Yes	ETCS L1
Hungary	Rajka oh - Ferencváros	Principal line	Győr - Komárom	37,4	2	25 kV AC / 50 Hz	750	C3	160	5	3	80/410	GA	G2	n.a.	Yes	Yes	ETCS L1
Hungary	Rajk oh - Ferencváros	Principal line	Komárom - Tata	20,1	2	25 kV AC / 50 Hz	750	C3	160	8	8	80/410	GA	G2	n.a.	Yes	Yes	ETCS L1
Hungary	Rajka oh - Ferencváros	Principal line	Tata - Kelenföld	68,5	2	25 kV AC / 50 Hz	750	C3	120/140	8	8	80/410	GA	G2	n.a.	Yes	Yes	ETCS L1
Hungary	Rajka oh - Ferencváros	Principal line	Kelenföld - Ferencváros	5,7	2	25 kV AC / 50 Hz	750	C3	80	8	8	80/410	GA	G2	n.a.	Yes	Yes	ETCS L2
Hungary	Szob - Ferencváros	Principal line	Szob oh - Vác	30,5	2	25 kV AC / 50 Hz	750	C3	100	4	6	70/400	GA	G2	n.a.			

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Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (%)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Hungary	Szob - Ferencváros	Principal line	Vác - Rákospalota - Újpest	25,6	2	25 kV AC / 50 Hz	750	C3	120	4	6	70/400	GA	G2	n.a.			
Hungary	Szob - Ferencváros	Principal line	Rákospalota-Újpest - AF el.	3,3	1	25 kV AC / 50 Hz	750	C3	60	7	7	70/400	GA	G2	n.a.			
Hungary	Szob - Ferencváros	Principal line	AF el. - Kőbánya felső	8,9	2	25 kV AC / 50 Hz	750	C3	80	7	7	70/400	GA	G2	n.a.			
Hungary	Szob - Ferencváros	Principal line	Kőbánya felső - Ferencváros	4,7	2	25 kV AC / 50 Hz	750	C3	60	7	7	80/410	GA	G2	n.a.			
Hungary	Ferencváros - Lőkösháza oh	Principal line	Kőbánya felső - Rákos	3,3	2	25 kV AC / 50 Hz	750	C2	80	7	7	80/410	GA	G2	n.a.	Yes	Yes	
Hungary	Ferencváros - Lőkösháza oh	Principal line	Rákos - Újszász	76,1	2	25 kV AC / 50 Hz	750	C2	100	6	6	80/410	GA	G2	n.a.	Yes	Yes	
Hungary	Ferencváros - Lőkösháza oh	Principal line	Újszász - Szolnok	17,3	2	25 kV AC / 50 Hz	750	C2	120	4	4	80/410	GA	G2	n.a.	Yes	Yes	
Hungary	Ferencváros - Lőkösháza oh	Principal line	Szolnok - Szajol	10,3	2	25 kV AC / 50 Hz	750	C3	120	4	4	80/410	GA	G2	n.a.	Yes	Yes	
Hungary	Ferencváros - Lőkösháza oh	Principal line	Szajol - Békéscsaba	85,3	2	25 kV AC / 50 Hz	750	C3	100	4	4	80/410	GA	G2	n.a.	Yes	Yes	
Hungary	Ferencváros - Lőkösháza oh	Principal line	Békéscsaba - Lőkösháza	31,8	1	25 kV AC / 50 Hz	750	C2	120/100	4	2	70/400	GA	G2	n.a.	Yes	Yes	
Hungary	Ferencváros - Soroksár-Terminál	Connecting line	Ferencváros - Soroksári út	1,8	2	25 kV AC / 50 Hz	750	D3	80	11	2	80/410	GA	G2	n.a.			
Hungary	Ferencváros - Soroksár-Terminál	Connecting line	Soroksári út - Soroksár	7,1	1	25 kV AC / 50 Hz	750	D3	100	11	2	80/410	GA	G2	n.a.			
Hungary	Ferencváros - Soroksár-Terminál	Connecting line	Soroksár - Soroksár-Terminál	3,5	1	25 kV AC / 50 Hz	750	C3	40	5	5	80/410	GA	G2	n.a.			
Hungary/Austria	Ebenfurth - Sopron Rendező	Principal line	Ebenfurth - Sopron Rendező	33	1	25 kV AC / 50 Hz	650	D4	100	10	10	70/400	GA	G2	n.a.			
Hungary	Sopron oh. - Győr	Principal line	Sopron oh. - Győr	89,7	1	25 kV AC / 50 Hz	600	C4	100/120	6	7	70/400	GA	G2	n.a.			
Hungary	Ferencváros - Kőbánya-Kispest	Diversionary line	Ferencváros - Kőbánya-Kispest	5,1	2	25 kV AC / 50 Hz	750	D3	80	8	8	70/400	GA	G2	n.a.			
Hungary	Kőbánya-Kispest - Szolnok	Diversionary line	Kőbánya-Kispest - Szolnok	89,6	2	25 kV AC / 50 Hz	750	C3	120	7	3	70/400	GA	G2	n.a.			
Hungary	Szajol - Biharkeresztes	Diversionary line	Szajol - Püspökladány	67	2	25 kV AC / 50 Hz	700	C3	120	5	5	70/400	GA	G2	n.a.			
Hungary	Szajol - Biharkeresztes	Diversionary line	Püspökladány - Biharkeresztes	56,8	1	Non-electrified	750	C3	100	3	3	70/400	GA	G2	n.a.			
Hungary	Vác - Hatvan - Újszász	Diversionary line	Vác - Aszód	33,8	1	25 kV AC / 50 Hz	700	C2	80	12	8	70/400	GA	G2	n.a.			
Hungary	Vác - Hatvan - Újszász	Diversionary line	Aszód - Hatvan	15,9	2	25 kV AC / 50 Hz	750	C3	120	8	8	70/400	GA	G2	n.a.			

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Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (‰)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Hungary	Vác - Hatvan - Újszász	Diversionary line	Hatvan - Újszász	52,3	1	25 kV AC / 50 Hz	750	C2	100	3	3	70/400	GA	G2	n.a.			
Romania	Lőkösháza oh - Arad	Principal line	Lőkösháza - Curtici	11,1	1	25 kV AC / 50 Hz	750	C3	100	1	8	45/375	C	n.a.	ground-train communications; VHF- 146 MHz	GSM-R under construction		ETCS L1 under construction
Romania	Lőkösháza oh - Arad	Principal line	Curtici - Arad	17	2	25 kV AC / 50 Hz	720	C3	120	3	0	45/375	C	n.a.	ground-train communications; VHF- 146 MHz	GSM-R under construction		ETCS L2 under construction
Romania	Arad - Timisoara	Principal line	Arad - Timisoara	57,3	2	25 kV AC / 50 Hz	720	C3	60	5	5	45/375	C	n.a.	ground-train communications; VHF- 146 MHz	NO GSM-R		NO ETCS
Romania	Timisoara - Craiova	Principal line	Timisoara - Orsova	186,5	1	25 kV AC / 50 Hz	720	C3	70	21	1	45/375	B	n.a.	ground-train communications; VHF- 146 MHz	NO GSM-R		NO ETCS
Romania	Timisoara - Craiova	Principal line	Orsova - Filiasi	101,9	1	25 kV AC / 50 Hz	720	C3	80	30	2	45/375	B	n.a.	ground-train communications; VHF- 146 MHz	NO GSM-R		NO ETCS
Romania	Timisoara - Craiova	Principal line	Filiasi - Craiova	35,9	2	25 kV AC / 50 Hz	750	C3	80	9	6	45/375	C	n.a.	ground-train communications; VHF- 146 MHz	NO GSM-R		NO ETCS

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Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (‰)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Romania	Craiova - Vidin	Principal line	Craiova - Golenti	107,7	1	Non-electrified	600	C3	60	13	0	45/375	C	n.a.	ground-train communications; VHF- 146 MHz	NO GSM-R		NO ETCS
Romania	Craiova - Vidin	Principal line	Golenti - Vidin	21,7	1	Non-electrified	750	C3	60			45/375	n.a.	n.a.	ground-train communications; VHF- 146 MHz	NO GSM-R		ETCS L1 under construction
Romania	Arad - Simeria	Principal line	Arad - Simeria	157,3	2	25 kV AC / 50 Hz	720	C3	60	4	0	45/375	C	n.a.	ground-train communications; VHF- 146 MHz	GSM-R under tender		ETCS L2 under tender
Romania	Simeria - Brasov	Principal line	Simeria - Coslariu	69,3	2	25 kV AC / 50 Hz	675	C3	60	5	8	45/375	C	n.a.	ground-train communications; VHF- 146 MHz	GSM-R under construction		ETCS L2 under construction
Romania	Simeria - Brasov	Principal line	Coslariu - Sighisoara	98,4	2	25 kV AC / 50 Hz	600	C3	60	6	6	45/375	C	n.a.	ground-train communications; VHF- 146 MHz	GSM-R under construction		ETCS L2 under construction
Romania	Simeria - Brasov	Principal line	Sighisoara - Brasov	128,6	2	25 kV AC / 50 Hz	600	C3	60	12	0	45/375	C	n.a.	ground-train communications; VHF- 146 MHz	GSM-R under tender (except Apata - Cata)		ETCS L2 under tender (except Apata - Cata)
Romania	Brasov - Bucuresti	Principal line	Brasov - Predeal	26,2	2	25 kV AC / 50 Hz	650	C3	35	28	5	45/375	B	n.a.	ground-train communications; VHF- 146 MHz	NO GSM-R		NO ETCS

6.2 ERTMS Deployment Plan

Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (‰)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Romania	Brasov - Bucuresti	Principal line	Predeal - Brazi	92,2	2	25 kV AC / 50 Hz	640	C3	60	17	3	45/375	C	n.a.	ground-train communications; VHF- 146 MHz	NO GSM-R		NO ETCS
Romania	Brasov - Bucuresti	Principal line	Brazi - Bucuresti	51,8	2	25 kV AC / 50 Hz	720	D4	120	5	5	45/375	C	n.a.	ground-train communications; VHF- 146 MHz	GSM-R under construction		ETCS L2 under construction
Romania	Bucuresti - Constanta	Principal line	Bucuresti - Fetesti	146,6	2	25 kV AC / 50 Hz	720	D4	120	6	3	45/375	C	n.a.	ground-train communications; VHF- 146 MHz	NO GSM-R		ETCS L1 under construction
Romania	Bucuresti - Constanta	Principal line	Fetesti - Constanta	78,4	2	25 kV AC / 50 Hz	720	D4	120	15	3	45/375	C	n.a.	ground-train communications; VHF- 146 MHz	NO GSM-R		ETCS L1 under construction
Romania	Biharkeresztes oh - Coslariu	Diversionary line	Biharkeresztes - Oradea Est	21,9	1	Non-electrified	750	C3	60	5	7	45/375	C	n.a.	ground-train communications; VHF- 146 MHz	NO GSM-R		NO ETCS
Romania	Biharkeresztes oh - Coslariu	Diversionary line	Oradea Est - Cluj Napoca Est	155	2	Non-electrified	600	C3	70	20	0	45/375	C	n.a.	ground-train communications; VHF- 146 MHz	NO GSM-R		NO ETCS
Romania	Biharkeresztes oh - Coslariu	Diversionary line	Cluj Napoca Est - Coslariu	98,9	2	25 kV AC / 50 Hz	600	C3	70	20	0	45/375	C	n.a.	ground-train communications; VHF- 146 MHz	NO GSM-R		NO ETCS

6.2 ERTMS Deployment Plan

Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (%)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Romania	Craiova - Bucuresti	Diversiory line	Craiova - Videle	158	2	25 kV AC / 50 Hz	750	C3	80	9	8	45/375	C	n.a.	ground-train communications; VHF- 146 MHz	NO GSM-R		NO ETCS
Romania	Craiova - Bucuresti	Diversiory line	Videle - Bucuresti	50	2	25 kV AC / 50 Hz	750	C3	70	9	8	45/375	C	n.a.	ground-train communications; VHF- 146 MHz	NO GSM-R		NO ETCS
Romania	Videle - Ruse	Diversiory line	Videle - Giurgiu Nord	63	1	Non-electrified	600	C3	60	16	8	45/375	C	n.a.	ground-train communications; VHF- 146 MHz	NO GSM-R		NO ETCS
Romania	Videle - Ruse	Diversiory line	Giurgiu Nord - Ruse	4,8	1	Non-electrified	600	C3	60	10	0	45/375	C	n.a.	ground-train communications; VHF- 146 MHz	NO GSM-R		NO ETCS
Romania	Bucuresti - Giurgiu	Diversiory line	Bucuresti - Giurgiu Nord	64	1	Non-electrified	740	C3	60	10	4	45/375	C	n.a.	ground-train communications; VHF- 146 MHz	NO GSM-R		NO ETCS
Romania	Simeria - Filiasi	Diversiory line	Simeria - Filiasi	201,6	1	25 kV AC / 50 Hz	550	C3	60	18	0	45/375	B	n.a.	ground-train communications; VHF- 146 MHz	NO GSM-R		NO ETCS
Bulgaria	Vidin - Sofia	Principal line	Vidin - Brusarci	86,9	1	25 kV AC / 50 Hz	584	D4	70	1	26	55/385	GB	G2	n.a.	n.a.	n.a.	n.a.
Bulgaria	Vidin - Sofia	Principal line	Brusarci - Mezdra jug	92,8	1	25 kV AC / 50 Hz	550	D4	80	9	17	55/385	GB	G2	n.a.	n.a.	n.a.	n.a.
Bulgaria	Vidin - Sofia	Principal line	Mezdra jug - Sofia	83,9	2	25 kV AC / 50 Hz	690	D4	70	7	11	55/385	GB	G2	n.a.	n.a.	n.a.	n.a.

6.2 ERTMS Deployment Plan

Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (‰)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Bulgaria	Sofia - Kulata	Principal line	Sofia - Radomir	47,4	1	25 kV AC / 50 Hz	571	D4	95	3	25,4	55/385	GB	G2	n.a.	n.a.	n.a.	n.a.
Bulgaria	Sofia - Kulata	Principal line	Radomir - Kulata	159,9	1	25 kV AC / 50 Hz	535	D4	100	5	20,6	55/385	GB	G2	n.a.	n.a.	n.a.	n.a.
Bulgaria	Sofia - Svilengrad	Principal line	Sofia - Septemvri	102,8	2	25 kV AC / 50 Hz	636	D4	130	25	24,9	55/385	GC	G2	GSM-R	Yes	n.a.	L 1
Bulgaria	Sofia - Svilengrad	Principal line	Septemvri - Plovdiv	52,8	2	25 kV AC / 50 Hz	690	D4	160			55/385	GC	G2	GSM-R	Yes	n.a.	L 1
Bulgaria	Sofia - Svilengrad	Principal line	Plovdiv - Dimitrovgrad	76,8	2	25 kV AC / 50 Hz	700	D4	160	5	9	55/385	GC	G2	GSM-R	Yes	n.a.	L 1
Bulgaria	Sofia - Svilengrad	Principal line	Dimitrovgrad - Simeonovgrad	23,1	1	Non-electrified	568	D4	160			55/385	GC	G2	GSM-R	Yes	n.a.	L 1
Bulgaria	Sofia - Svilengrad	Principal line	Simeonovgrad - Svilengrad	41,3	1	Non-electrified	568	D4	160	10	15,8	55/385	GC	G2	GSM-R	Yes	n.a.	L 1
Bulgaria	Ruse - Karnobat	Diversionary line	Ruse - Razgrad	71,2	1	25 kV AC / 50 Hz	630	D4	80	25	17,5	55/385	GC	G2	n.a.	n.a.	n.a.	n.a.
Bulgaria	Ruse - Karnobat	Diversionary line	Razgrad - Samuil	22,2	1	25 kV AC / 50 Hz	800	D4	80	18	16,8	55/385	GC	G2	n.a.	n.a.	n.a.	n.a.
Bulgaria	Ruse - Karnobat	Diversionary line	Samuil - Kaspichan	48,8	1	25 kV AC / 50 Hz	620	D4	70	19,1	17,2	55/385	GC	G2	n.a.	n.a.	n.a.	n.a.
Bulgaria	Ruse - Karnobat	Diversionary line	Kaspichan - Sindel	50,7	2	25 kV AC / 50 Hz	660	D4	100	9,8	9,8	55/385	GC	G2	n.a.	n.a.	n.a.	n.a.
Bulgaria	Ruse - Karnobat	Diversionary line	Sindel - Komunari	39,6	2	25 kV AC / 50 Hz	660	D4	100	12	10	55/385	GC	G2	n.a.	n.a.	n.a.	n.a.
Bulgaria	Ruse - Karnobat	Diversionary line	Komunari - Karnobat	82,2	1	25 kV AC / 50 Hz	550	D4	100	12	12	55/385	GC	G2	n.a.	n.a.	n.a.	n.a.
Bulgaria	Karnobat - Svilengrad	Diversionary line	Karnobat - Nova Zagora	93,3	1	25 kV AC / 50 Hz	600	D4	140	7	10	55/385	GC	G2	n.a.	n.a.	n.a.	L1
Bulgaria	Karnobat - Svilengrad	Diversionary line	Nova Zagora - Simenovgrad	61,5	1	Non-electrified	445	D4	60	11,5	11	55/385	GC	G2	n.a.	n.a.	n.a.	n.a.
Bulgaria	Nova Zagora - Stara Zagora	Diversionary line	Nova Zagora - Stara Zagora	33	1	25kV/50Hz	535	D4	160			55/385	GC	G2	n.a.	n.a.	n.a.	L1
Bulgaria	Stara Zagora - Dimitrovgrad	Diversionary line	Stara Zagora - Mihailovo	21,3	2	25kV/50Hz	535	D4	160	8,1	9,2	45/360	GC	G2	n.a.	n.a.	n.a.	L1
Bulgaria	Stara Zagora - Dimitrovgrad	Diversionary line	Mihailovo - Dimitrovgrad	33,6	1	25kV/50Hz	535	D4	70	15,1	16	45/360	GC	G2	n.a.	n.a.	n.a.	n.a.

6.2 ERTMS Deployment Plan

Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (‰)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Bulgaria	Plovdiv - Mihailovo	Diversionary line	Plovdiv - Mihailovo	83,7	1	25kV/50Hz	535	D4	120	13,92	13,09	55/385	GC	G2	n.a.	n.a.	n.a.	ETCS 1.2.0 (Plovdiv - Skutare); ETCS class B (Skutare - Mihailovo) L1
Bulgaria	Karnobat - Burgas	Diversionary line	Karnobat - Burgas	59,7	2	25 kV AC / 50 Hz	560	D4	130	4	10	55/385	GC	G2	n.a.	n.a.	n.a.	L1
Greece	Kulata - Thessaloniki	Principal line	Kulata - Promachon	1	1	Non-electrified	600	C4	20	0	12,5	45/375	DE3	n.a.	n.a.	n.a.	n.a.	n.a.
Greece	Kulata - Thessaloniki	Principal line	Promachon - Thessaloniki Port	143,4	1	Non-electrified	640	C4	80	21	19	45/375	DE3	n.a.	GSM-R (end of 2017)	Yes	Yes	Level 1 (end of 2017)
Greece	Thessaloniki - Athens	Principal line	Thessaloniki - Platy	32,1	2	25 kV AC / 50 Hz	720	C4	100	10	10	45/375	DE3	n.a.	GSM-R (end of 2017)	Yes	Yes	Level 1 (end of 2017)
Greece	Thessaloniki - Athens	Principal line	Platy - Larisa	127,9	2	25 kV AC / 50 Hz	750	D4	100	14	14	45/375	DE3	n.a.	GSM-R (end of 2017)	Yes	Yes	Level 1 (end of 2017)
Greece	Thessaloniki - Athens	Principal line	Larisa - Domokos	57,5	2	25 kV AC / 50 Hz	750	D4	100	14	14	45/375	DE3	n.a.	GSM-R (end of 2017)	Yes	Yes	Level 1 (end of 2017)
Greece	Thessaloniki - Athens	Principal line	Domokos - Tithorea	121,6	1	Non-electrified	700	C4	90	21	21	45/375	DE3	n.a.	n.a.	na	n.a.	na
Greece	Thessaloniki - Athens	Principal line	Tithorea - Inoi	93,2	2	Non-electrified	750	D4	100	16	16	45/375	DE3	n.a.	GSM-R (end of 2017)	Yes	Yes	Level 1 (end of 2017)
Greece	Thessaloniki - Athens	Principal line	Inoi - SKA	52,3	2	Non-electrified	600	C4	100	17	17	45/375	DE3	n.a.	GSM-R (end of 2017)	Yes	Yes	Level 1 (end of 2017)
Greece	Thessaloniki - Athens	Principal line	SKA - Athens	8,9	2	25 kV AC / 50 Hz	500	D4	100	0	22	70/400	DE3	n.a.	n.a.	na	n.a.	na
Greece	SKA-Kiato	Principal line	SKA-Thriassio	23,5	2	25 kV AC / 50 Hz	750	D4	100	15	15	70/400	DE3	n.a.	GSM-R (end of 2017)	na	n.a.	na
Greece	Athens - Piraeus	Principal line	Thriassio-Ikonio	19	1	Non-electrified	700	D4	90	15	14	70/400	DE3	n.a.	n.a.	na	n.a.	na
Greece	Svilengrad - Alexandroupolis	Diversionary line	Svilengrad - Ormenio	8,7	1	Non-electrified	600	C4	80	10	10	70/400	G2	n.a.	n.a.	na	n.a.	na
Greece	Svilengrad - Alexandroupolis	Diversionary line	Ormenio - Pithio	61,7	1	Non-electrified	500	C4	80	15,5	15,5	70/400	G2	n.a.	n.a.	na	n.a.	na

6.2 ERTMS Deployment Plan

Country	Corridor Line		Line Section	Length of line (km)	Number of Tracks	Electric Traction (kV/Hz)	Maximum length of train (m)	Line category regarding axle load	Maximum speed (km/h)	Maximum gradient (‰)		Loading gauge			Existing Radio System	GSMR		ETCS
	Start - End	Category	From - To							From to	Back	Intermodal freight code (P/C)	Interoperational gauge	Multinational gauge		Voice	Data	Level
Greece	Svilengrad - Alexandroupolis	Diversionary line	Pithio - Alexandroupolis	111,6	1	Non-electrified	500	C4	80	15	15	70/400	G2	n.a.	n.a.	na	n.a.	na
Greece	Alexandroupolis - Serres	Diversionary line	Alexandroupolis - Xanthi	116,4	1	Non-electrified	500	C4	80	28	28	32	G2	n.a.	n.a.	na	n.a.	na
Greece	Alexandroupolis - Serres	Diversionary line	Xanthi - Drama	95,3	1	Non-electrified	500	C4	80	28	28	32	G2	n.a.	n.a.	na	n.a.	na
Greece	Alexandroupolis - Serres	Diversionary line	Drama - Serres	70,1	1	Non-electrified	500	C4	80	18	17	70/400	G2	n.a.	n.a.	na	n.a.	na
Greece	Serres - Strymonas	Diversionary line	Serres - Strymonas	31,7	1	Non-electrified	500	C4	80	14	14	70/400	G2	n.a.	n.a.	na	n.a.	na
Greece	Athens - Piraeus	Connecting line	Athens -Rentis/ Piraeus	8,6	2	Non-electrified	600	C4	80	14	17	45/375	DE3	n.a.	n.a.	na	n.a.	na
Greece	Larisa - Volos Port	Connecting line	Larisa - Volos Port	61	1	Non-electrified	500	C4	80	14	14	45/375	DE3	n.a.	n.a.	na	n.a.	na

6.3 Capacity Management Plan

Table 2: Capacity Management Plan

Member State	Line Section	Bottleneck	Reasons	Suggestions How to Remove Bottlenecks			
				Project Name and Description	End Date	Costs in mil. of Euro	Financial Sources
Germany	Bad Schandau - Wilhelmshaven	Only between Oldenburg and Wilhelmshaven	no electric traction	Project ABS Oldenburg - Wilhelmshaven (electrification)	2023	818	State budget
Germany	Bremen - Bremerhaven	-	-	-			
Germany	Berlin/ Magedeburg - Hamburg	-	-	-			
Germany	Dresden - Rostock	-	-	-			
Czech Republic	Praha - Česká Třebová	Line capacity consumption	between 5:00 - 20:00 more than 100%	-			
Czech Republic	Česká Třebová - Parník	Max. speed 75 - 90 km/h		-			
Czech Republic	Ústí nad Orlicí (259,209) - Brandýs nad Orlicí (263,850)	Max. speed 80 - 85 km/h		-			
Czech Republic	Brandýs nad Orlicí (267,660) - Choceň (268,737)	Max. speed 80 - 85 km/h		-			
Czech Republic	Zádulka - Česká Třebová	Max. speed 60 km/h		-			
Czech Republic	Svitavy (220,355) - Březová nad Svitavou (218,224)	Max. speed 85 - 100 km/h		-			
Czech Republic	Letovice - Rájec-Jestřebí	Max. speed 85 - 100 km/h		-			

6.3 Capacity Management Plan

Member State	Line Section	Bottleneck	Reasons	Suggestions How to Remove Bottlenecks			
				Project Name and Description	End Date	Costs in mil. of Euro	Financial Sources
Czech Republic	Blansko - Brno-Maloměřice	Max. speed 70 - 120 km/h		-			
Czech Republic	Břeclav - Lanžhot	Max. speed 85 - 120 km/h	Track is routed across the highland terrain	-			
Czech Republic	Kutná Hora - Golčův Jeníkov	Max. speed 85 - 100 km/h	Track is routed across the highland terrain	-			
Czech Republic	Golčův Jeníkov - Víkaneč	Max. speed 75 - 80 km/h	Track is routed across the highland terrain	-			
Czech Republic	Víkaneč - Světlá nad Sázavou	Max. speed 65 - 70 km/h	Track is routed across the highland terrain	-			
Czech Republic	Světlá nad Sázavou - Okrouhlice	Max. speed 85 - 100 km/h	Track is routed across the highland terrain	-			
Czech Republic	Okrouhlice - Havlíčkův Brod	Max. speed 75 - 80 km/h	Track is routed across the highland terrain	-			
Czech Republic	Havlíčkův Brod - Přibyslav	Max. speed 85 - 100 km/h	Track is routed across the highland terrain	-			
Czech Republic	Žďár nad Sázavou - Ostrov nad Oslavou	Max. speed 85 - 100 km/h	Track is routed across the highland terrain	-			
Czech Republic	Sklené nad Oslavou - Říkonín	Max. speed 85 - 100 km/h	Track is routed across the highland terrain	-			
Czech Republic	Tišnov - Kuřim	Max. speed 85 - 100 km/h	Track is routed across the highland terrain	-			
Austria	Břeclav - Gänserndorf	No bottlenecks					
Austria	Gänserndorf - Wien Zvbf	No bottlenecks					
Austria	Gänserndorf - Marchegg Gr.	Not electrified					

6.3 Capacity Management Plan

Member State	Line Section	Bottleneck	Reasons	Suggestions How to Remove Bottlenecks			
				Project Name and Description	End Date	Costs in mil. of Euro	Financial Sources
Austria	Wien Zvbf - Hegyeshalom	No bottlenecks					
Austria	Wien Zvbf - Wiener Neustadt (über Baden)	No bottlenecks					
Austria	Wiener Neustadt - Sopron via Loipersbach - Schattendorf	Not electrified, short passing tracks in stations	Not electrified, short passing tracks in stations hampering the handling of longer trains	Wiener Neustadt - Loipersbach-Schattendorf: Electrification and line upgrade	2026	60	Realization depending on financing agreement. Pending decision.
Austria	Gramatneusiedl - Wampersdorf	No bottlenecks					
Austria	Parndorf - Bratislava-Petrzalka	No bottlenecks					
Austria	Wien Zvbf - Ebenfurth	No bottlenecks					
Austria	Ebenfurth - Wiener Neustadt	No bottlenecks					
Austria	Ebenfurth - Sopronn border	No bottlenecks					
Slovakia	Kúty border - Devínska N.Ves	1. two bridges in section Veľké Leváre - Malacky-Zohor, 2. Devínska N. Ves	1. reduced speed on bridges (80 km/h, 120 km/h) 2. lack of tracks due to: A. change of loco type (electric/ diesel) towards Austria,	1. recontstruction of bridges for speed 140 km/h, 2. building of the seconds track to Austria	1.a/2023 except Malacky - Kuty 1.b/after 2023 2. 2020	1. a/287 1.b/ 263 2./ 5 electrification only	1.ab/CEF/ State budget 2. OPII
Slovakia	Devínska N. Ves - Bratislava hl.st.	1. tunnel Bratislava Lamač - Bratislava hl.st., 2. Bratislava (all stations)	1. often maintenance → mostly only 1 line track available → lack of capacity, 2. limiting of some locomotives	1. complex tunnel reconstruction, 2. removal of 25 Hz track circuits	According to the results of Feasibility study of junction Bratislava after 2030	assumption 600	OPII/State budget

6.3 Capacity Management Plan

Member State	Line Section	Bottleneck	Reasons	Suggestions How to Remove Bottlenecks			
				Project Name and Description	End Date	Costs in mil. of Euro	Financial Sources
Slovakia	Bratislava hl.st. - Dunajská Streda - Komárno border	1. Bratislava hl.st.- Bratislava Nové Mesto, 2. Bratislava Nové Mesto - Komárno	1. one track line → lack of capacity (strong passenger + freight transport today, expectation of next increasing in the future), 2. one track line → lack of capacity (strong passenger transport, connection to intermodal terminal)	1. building of 2. line track (Bratislava hl.st. - Bratislava Nové Mesto), 2. electrification, building of 2. line track (Bratislava Nové Mesto - Komárno)	According to the results of Feasibility study of junction Bratislava after 2030	assumption 600	OPII/State budget
Slovakia	Bratislava hl.st. - Rusovce border	Bratislava Petržalka	limited length of trains towards Austria 620 m for trains with electric locos, 690 m for trains with diesel locos), change of traction (SK/AT)	building of trolley line over the connecting line	According to the results of Feasibility study of junction Bratislava after 2030	assumption 600	OPII/State budget
Slovakia	Bratislava hl.st.- Nove Zamky	-	-	-			
Slovakia	Nove Zamky - Komrano border	-	-	-			
Slovakia	Nove Zamky - Sturovo border	(Kamenica n.Hronom) Šturovo	reduced speed in Sturovo (60 km/h)	reconstruction of line tracks in Sturovo for speed 120 km/h	after 2030	n.a.	n.a
Hungary	Rusovce border - Hegyeshalom	all section	reduced speed on bridges axle load 21 t	"Preparatory activities for the upgrade of the Hegyeshalom-Rajka (HU/SK border) railway line section" Preparatory CEF proect			
Hungary	Hegyeshalom border - Hegyeshalom						

6.3 Capacity Management Plan

Member State	Line Section	Bottleneck	Reasons	Suggestions How to Remove Bottlenecks			
				Project Name and Description	End Date	Costs in mil. of Euro	Financial Sources
Hungary	Hegyeshalom - Győr						
Hungary	Sopron border - Sopron	all section	single track+long distance between stations+at least hourly regular interval suburban trains	paralellisation project between 2015 and 2020			
Hungary	Ágfalva border - Sopron	-	-	-			
Hungary	Sopron - Győr	Sopron station and Sopron - Ágfalva section	single track+long distance between stations+at least hourly regular interval suburban trains	paralellisation project between 2015 and 2020			
Hungary	Győr - Komárom	-	-	-			
Hungary	Komárno border - Komárom	-	-	-			
Hungary	Komárom - Ferencváros	Ferencváros station	level crossing of transit and shunting yard traffic just at the Budapest southern Danube bridge (almost only rail link between the Eastern and Western part of Hungary)	Capacity increase is under preparation.	n.a.	n.a.	n.a.
Hungary	Stúrovo border - Vác	No bottlenecks					

6.3 Capacity Management Plan

Member State	Line Section	Bottleneck	Reasons	Suggestions How to Remove Bottlenecks			
				Project Name and Description	End Date	Costs in mil. of Euro	Financial Sources
Hungary	Vác - Újszász	-	-	-			
Hungary	Vác - Ferencváros	Rákospalota - Újpest station	outworn station with manual switching+node of high frequency suburban trains	planned reconstruction of station between 2014 and 2020	2020	n.a.	Cohesion fund
Hungary	Ferencváros - Soroksár-Terminál	-	-	-			
Hungary	Ferencváros - Újszász	-	-	-			
Hungary	Újszász - Szolnok	-	-	-			
Hungary	Ferencváros - Szolnok	-	-	-			
Hungary	Szolnok - Szajol	-	-	-			
Hungary	Szajol - Biharkeresztes border	-	-	-			
Hungary	Szajol - Lőkösháza border	-	-	-			
Romania	Border (RO/HU) - Curtici	Finalised works in operational tests		Rehabilitation of the railway track line, section 1: Border(RO/HU)- Curtici-Arad-Km 614	2018		

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Member State	Line Section	Bottleneck	Reasons	Suggestions How to Remove Bottlenecks			
				Project Name and Description	End Date	Costs in mil. of Euro	Financial Sources
Romania	Curtici - Arad	Finalised works in operational tests		Rehabilitation of the railway track line, section 1: Border(RO/HU)-Curtici-Arad-Km 614	2018		
Romania	Arad - Simeria	Arad-km 614 Finalised works in operational tests Tender procedure for the section km 614-Simeria		* Rehabilitation of the railway track line, section 1: Border(RO/HU)-Curtici-Arad-Km 614 * Rehabilitation of the railway track line, Sections 2+3: Km 614-Gurasada and Gurasada - Simeria	for Arad - Km 614 end date 2018 for Km 614-Simeria: estimated end date 2020		
Romania	Simeria - Coslariu	Congested capacity	Modernization works	Rehabilitation of the railway track line, section Simeria-Coslariu	2020		
Romania	Coslariu - Sighișoara	Congested capacity	Modernization works	Rehabilitation of the railway track line, section Coslariu - Sighisoara	2020		
Romania	Sighișoara - Brașov	-					
Romania	Brașov - Predeal	-					
Romania	Predeal - Brazi	-					
Romania	Brazi - București	-					
Romania	București - Fetești	-					
Romania	Fetești - Constanța	Bottleneck on the section Fetesti - Medgidia, rehabilitation works, Current state up to the works completion		Rehabilitation works for railway bridges located over Danube river at km 152 + 149 and km 165 + 817, on the railway section Bucharest - Constanta	2018		
Romania	Arad - Timișoara	-					
Romania	Timișoara - Orsova	-					

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Member State	Line Section	Bottleneck	Reasons	Suggestions How to Remove Bottlenecks			
				Project Name and Description	End Date	Costs in mil. of Euro	Financial Sources
Romania	Orsova - Filași		-				
Romania	Filași - Craiova		-				
Romania	Craiova - Calafat		-				
Romania	Calafat - Border RO/BG		-				
Romania	Border (RO/HU) - Episcopia Bihor		-				
Romania	Episcopia Bihor - Coslariu		-				
Romania	Simeria - Gura Motru		-				
Romania	Craiova - Bucuresti	Bottleneck on the section Chiajna - Gradinari, rehabilitation works, Current state up to the works completion		Rehabilitation works for bridges, culverts and tunnels - SRCF Bucharest (7 bridges which 4 are located on Gradinari - Domnesti railways stations)	2018		
Bulgaria	Vidin - Brusartsi	Dimovo - Oreshec and Dimovo-Sracimir	Max gradients:29‰ / 28‰	2020 after reconstruction and modernization of the Corridor			
Bulgaria	Brusartsi - Mezdra	Brusartsi-Medkovec and Mezdra-Vraca	Max gradients:24‰ / 18‰	-			
Bulgaria	Mezdra - Sofia	Zverino-Lakatnik and Iliyanci-Kurilo	Max gradients:12‰ / 3‰	-			
Bulgaria	Sofia - Radomir	Hrabursko-Razmenna and Batanovci-Razmenna	Max gradients:13‰ / 16‰	-			
Bulgaria	Radomir - Kulata	Gulubnik-Delyan and Dyakovo-Delyan	Max gradients:15‰ / 22‰	-			

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Member State	Line Section	Bottleneck	Reasons	Suggestions How to Remove Bottlenecks			
				Project Name and Description	End Date	Costs in mil. of Euro	Financial Sources
Bulgaria	Sofia - Septemvri	Pobit Kamak - Vakarel and Kostenec - Nemirovo	Max gradients:29‰ / 29‰	Some of the projects for reconstruction and modernization are under way and some other projects will be commenced during the second period of the Operational Program of Transportation			
Bulgaria	Septemvri - Plovdiv	Pazardjik - Ognjovo and Stamboliiski - Ognjovo	Max gradients:5‰/ 7‰	-			
Bulgaria	Plovdiv - Dimitrovgrad	Popovica - Parvomai and Dimitrovgrad - Sadovo	Max gradients:5‰/ 5‰	-			
Bulgaria	Dimitrovgrad - Svilengrad	Simeonovgrad - Svilengrad and Ljubimec - Harmanli	Max gradients:8‰/ 10‰	-			

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Member State	Line Section	Bottleneck	Reasons	Suggestions How to Remove Bottlenecks			
				Project Name and Description	End Date	Costs in mil. of Euro	Financial Sources
Greece	Kulata - Promachon	Single Line in poor condition	No electrification, no ERTMS,	Railway line upgrading with electrification			
Greece	Kulata - Promachon	Single Line in poor condition	<22.5t, < 100km/h	Railway line upgrading with electrification			
Greece	Promachon - Thessaloniki Port	Single Line in poor condition. Strymonas bridge.	The bridge on the Strymonas River does not allow for a direct movement of trains in the direction to Promachonas/Kulata. Need for reversal of trains moving towards Bulgaria in the Strymonas station.	Planned Project The project involves the installation of electrification along the Thessaloniki – Strymonas – Promachonas rail corridor, 143 km long, the performance of localized interventions for the improvement of the line and railway stations in the section, as well as the installation of Automatic Level Crossing Systems. The tendering procedure for the studies of the project is under preparation.	na	120	Studies: CEF 2014-2020 Construction: NSRF 2014-2020 Operational Programme

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Member State	Line Section	Bottleneck	Reasons	Suggestions How to Remove Bottlenecks			
				Project Name and Description	End Date	Costs in mil. of Euro	Financial Sources
Greece	Promachon - Thessaloniki Port	Single Line in poor condition. Strymonas bridge.	No electrification, <22.5t, < 100km/h, <740m	Planned Project The project involves the installation of electrification along the Thessaloniki – Strymonas – Promachonas rail corridor, 143 km long, the performance of localized interventions for the improvement of the line and railway stations in the section, as well as the installation of Automatic Level Crossing Systems. The tendering procedure for the studies of the project is under preparation.			
Greece	Promachon - Thessaloniki Port	Single Line in poor condition. Strymonas bridge.	No ERTMS,	Ongoing Global Project for installation of ERTMS System	2017	na (Part of Global Project of 144 mil.€)	EU Operational Programs and National Funds
Greece	Thessaloniki - Platy	A number of old bridges restrict axle load	C4	Plans for reconstruction or replacing old bridges			
Greece	Thessaloniki - Platy	A number of old bridges restrict axle load	No ERTMS,	Ongoing Global Project for installation of ERTMS System	2017	na (Part of Global Project of 144 mil.€)	EU Operational Programs and National Funds
Greece	Platy - Larisa	-	No ERTMS	Ongoing Global Project for installation of ERTMS System	2017	na (Part of Global Project of 144 mil.€)	EU Operational Programs and National Funds

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Member State	Line Section	Bottleneck	Reasons	Suggestions How to Remove Bottlenecks			
				Project Name and Description	End Date	Costs in mil. of Euro	Financial Sources
Greece	Larisa - Domokos	-	No ERTMS	Ongoing Global Project for installation of ERTMS System	2017	na (Part of Global Project of 144 mil.€)	EU Operational Programs and National Funds
Greece	Domokos - Tithorea	Single Line in a mountainous area.	No electrification, no ERTMS, <22.5t, < 100km/h	The ongoing project involves the construction of the New Double High Speed Railway Line Tithorea – Lianokladi – Domokos which replaces the mountainous part of the existing single line, 122 km long, with a New Double High Speed Railway Line, 106 km long. A construction contract is currently in progress, which will complete the infrastructure works, involving the construction of the superstructure (ballasted track in the open sections and slabtrack in the tunnels), signalling, telecommanding, ETCS level 1 and electrification.	2018 (2019 GSM-R)	1800	EU Operational Programs, CEF
Greece	Tithorea - Inoi		No electrification	Electrification reinstitution project under development	2017	na (Part of Global Project of 21.2 mil.€)	National Funds
Greece	Tithorea - Inoi		no ERTMS	Ongoing Global Project for installation of ERTMS System	2017	na (Part of Global Project of 144 mil.€)	EU Operational Programs and National Funds

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Member State	Line Section	Bottleneck	Reasons	Suggestions How to Remove Bottlenecks			
				Project Name and Description	End Date	Costs in mil. of Euro	Financial Sources
Greece	Inoi - SKA	A number of old bridges restrict axle load.	<22.5t, <740m	Plans for general upgrading of the line and reconstruction of bridges			
Greece	Inoi - SKA		No electrification,	Electrification reinstitution project under development	2017	na (Part of Global Project of 21.2 mil.€)	National Funds
Greece	Inoi - SKA		no ERTMS,	Ongoing Global Project for installation of ERTMS System	2017	na (Part of Global Project of 144 mil.€)	EU Operational Programs and National Funds
Greece	SKA - Athens	-	No ERTMS for section from Athens RS to 3 Gefyres	ONGOING GLOBAL PROJECT Infrastructure and superstructure upgrade, singalling and ERTMS installation,	2020		
Greece	SKA - Athens	-	<740m	Planned Project Construction of the underground line section from Athens RS to 3 Gefyres with a 4 line-corridor . The relevant studies have been completed.			

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Member State	Line Section	Bottleneck	Reasons	Suggestions How to Remove Bottlenecks			
				Project Name and Description	End Date	Costs in mil. of Euro	Financial Sources
Greece	SKA - Thriassio	-	No ERTMS	Ongoing Global Project for installation of GSM-R System	2017	na (Part of Global Project of 63 mil.€)	EU Operational Programs and National Funds
Greece	Thriassio Ikonio	-	No electrification, no ERTMS (Line is part of Comprehensive Network)	Plans for electrification and GSM-R			
Greece	Svilengrad Ormenio	-	No electrification, no ERTMS, <22.5t, < 100km/h, <740m(Line is part of Comprehensive Network)	The planed project involves the renovation of infrastructure – trackwork in located stretches of the line, as well as the installation of electrification – signalling – ETCS Level 1 along the entire Alexandroupolis – Ormenio – Bulgarian borders line.(When funding is found)	na	160	(FUNDING NOT YET SECURED)
Greece	Ormenio Pithio	-	No electrification, no ERTMS, <22.5t, < 100km/h, <740m(Line is part of Comprehensive Network)	The planed project involves the renovation of infrastructure – trackwork in located stretches of the line, as well as the installation of electrification – signalling – ETCS Level 1 along the entire Alexandroupolis – Ormenio – Bulgarian borders line.(When funding is found)			(FUNDING NOT YET SECURED)
Greece	Pithio - Alexandroupolis	-	No electrification, no ERTMS,	The planed project involves the renovation of infrastructure – trackwork in located stretches of the line, as well as the installation of electrification – signalling – ETCS Level 1 along the entire Alexandroupolis – Ormenio – Bulgarian borders line.(When funding is found)			(FUNDING NOT YET SECURED)
Greece	Pithio - Alexandroupolis		<22.5t, < 100km/h, <740m	The planed project involves the renovation of infrastructure – trackwork in located stretches of the line, as well as the installation of electrification – signalling – ETCS			(FUNDING NOT YET SECURED)

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Member State	Line Section	Bottleneck	Reasons	Suggestions How to Remove Bottlenecks			
				Project Name and Description	End Date	Costs in mil. of Euro	Financial Sources
				Level 1 along the entire Alexandroupolis – Ormenio – Bulgarian borders line.(When funding is found)			
Greece	Alexandroupolis – Xanthi	-	No electrification, no ERTMS, <22.5t, < 100km/h, <740m	Plans for the upgrade, electrification and signaling of the line (if funds are found) The relevant studies have been completed			(FUNDING NOT YET SECURED)
Greece	Xanthi - Drama	-	No electrification, no ERTMS, <22.5t, < 100km/h, <740m (Line is part of Comprehensive Network)	Plans for the upgrade, electrification and signaling of the line (if funds are found) The relevant studies have been completed.			(FUNDING NOT YET SECURED)
Greece	Drama - Serres	-	No electrification, no ERTMS, <22.5t, < 100km/h, <740m (Line is part of Comprehensive Network)	Plans for the upgrade, electrification and signaling of the line (if funds are found) The relevant studies have been completed.			(FUNDING NOT YET SECURED)
Greece	Serres Strymonas	-	No electrification, no ERTMS, <22.5t, < 100km/h, <740m (Line is part of Comprehensive Network)	Plans for the upgrade, electrification and signaling of the line (if funds are found) The relevant studies have been completed.			(FUNDING NOT YET SECURED)
Greece	Athens -Rentis/ Piraeus	-	No ERTMS, <22.5t, < 100km/h, <740m	ONGOING GLOBAL PROJECT Infrastructure and superstructure upgrade, singalling and ERTMS installation, PLANED PROJECT construction of the underground line section Athens RS-3Gefyres with 4 lines, R.Station upgrades, the subleveling of the triple rail corridor section of Redi S.S. to Athens	2020 (Ongoing Project)	na	

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Member State	Line Section	Bottleneck	Reasons	Suggestions How to Remove Bottlenecks			
				Project Name and Description	End Date	Costs in mil. of Euro	Financial Sources
Greece	Athens -Rentis/ Piraeus		No electrification,	Ongoing works for electrification of the existing double track railway line Piraeus-Athens RS	2017	na	Regional Operational Program (ROP) Attica 2007-2013 and National Funds.
Greece	Larisa - Volos Port	-	No electrification, no ERTMS (Line is part of Comprehensive Network)	The project involves the installation of signalling, electrification and ETCS systems on the existing single-track railway line. Project is under Tendering Procedure	na	40	Operational Programme "Transport Infrastructures, Environment and Sustainable Development 2014-2020"