ANNEXES

Study on TEN-T
Core Network Corridor
"Rhine–Danube"

December 2014

Prepared by the Joint Venture of

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ANNEX I – LIST OF STAKEHOLDERS

MEMBER STATE AND 3RD COUNTRY REPRESENTATIVES

Name of Institution (English)	Country	Function	First Name	Name
Ministry for environment, sustainable development and energy	France		Anne	Pluvinage-Nierengarten
Federal Ministry of Transport and Digital Infrastructure (BMVI)	Germany		Georg	Henkelmann
			Ralf	Schulze
Federal Ministry for Transport, Innovation and Technology	Austria	Department International Infrastructure Networks, General Transport Infrastructure Planning	Barbara	Zimmermann
			Thomas	Spiegel
Ministry of Transport	Czech Republic		Jan	Ilík
			Jan	Bezděkovský
Permanent Representation of the Czech Republic to the EU		Road and rail transport, horizontal transport issues, maritime and inland waterways transport	Jiří	Veselý
Ministry of National Development	Hungary		Péter	Tóth
		Head of department for Managing TEN-T and CEF Projects	Beatrix	Horváth
Ministry of Transport, Construction and Regional Development	Slovakia	Director of Department	Stanislav	Trčík
Ministray of Foreign Affairs		Counselor	Ján	Krak
Ministry of Maritime Affairs, Transport and Infrastructure	Croatia		Kristijan	Ležaić
			Vjeran	Bašić
			Tomislav	Hodak

Name of Institution (English)	Country	Function	First Name	Name
Ministry of Transport, Information Technologies and Communications	Bulgaria	Director of Department	Galina	Vassileva
		Head of Department, National Transport Policy Directorate	Anita	Angelova
		Chief Expert, National Transport Policy Directorate	Petar	Benov
Ministry of Transport	Romania	Public Manager	Claudiu	Staicu
		General Director	Marcel Ioan	Bolos
		Secretary of State	Iulian	Matache
			Ionela	Roșu
Ministry of Construction, Transport and Infrastructure	Serbia	Minister of infrastructure	Zorana	Mihajlović
		Assistant Minister	Miodrag	Jocic
Ministry of Communications and Transport	Bosnia and Herzegovina	Expert Associate	Snezana	Hadzić
		Assistant Minister	Izet M.	Bajrambasic
Ministry of Infrastructure	Ukraine	Deputy Director of the Department for International Relations	Elena	Proskura
Mission of the Republic of Moldova to the European Union	Moldova	~~Counsellor~~	~~Camelia~~	~~Graur~~
		First Secretary	Eugen	Filip

INFRASTRUCTURE MANAGER - RAIL, INLAND WATERWAYS, PORTS

France

Name of Institution (English)	Stakeholder Group	Function	First Name	Name
Réseau Ferré de France (RFF)	Rail	informed through the Ministry		
Ministry for environment, sustainable development and energy	Inland Waterway	dealt within the Rhine-Alpine Corridor		
Independent port of Strasbourg	Inland ports	dealt within the Rhine-Alpine Corridor		

Germany

Name of Institution (English)	Stakeholder Group	Function	First Name	Name
DB Netz AG	Rail	Head of Transport	Thomas	Schneider
		Corridor Coordinator	Sophie	Ismaier
		European Corridor Management	Oliver	Sellnick
Federal Ministry of Transport and Digital Infrastructure (BMVI), WS1 (Waterways)	Inland Waterway	represented through UI 23		
Bayernhafen GmbH & Co. KG	Inland ports	General Manager	Joachim	Zimmermann

Austria

Name of Institution (English)	Stakeholder Group	Function	First Name	Name
ÖBB-Infrastruktur AG (Austrian Federal Railways Infrastructure Company)	Rail	Member of the Board of Management	Andreas	Matthä
		Head of International Relations	Harald	Hotz
Federal Ministry for Transport, Innovation and Technology	Inland Waterway		Reinhard	Vorderwinkler
viadonau - Austrian Waterway Management Company	Inland Waterway	General Manager	Hans-Peter	Hasenbichler
Interessensgemeinschaft der österreichischen Binnenhäfen (IGÖD)	Inland ports		Friedrich	Lehr
Wiener Hafen und Lager Ausbau- und Vermögensverwaltung GmbH & Co KG		Head of Project development & Internationalisation	Peter	Rojko

Czech Republic

Name of Institution (English)	Stakeholder Group	Function	First Name	Name
Railway Infrastructure Administration	Rail	Director General	Jiří	Kolář
RFC9 C-OSS	RFC	Head of RFC9 C-OSS	Markéta	Šlachtová
Directorate of Waterways Czech Republic	Inland Waterway	dealt within the OEM Corridor		
State Navigation Administration	Inland Waterway	dealt within the OEM Corridor		

Hungary

Name of Institution (English)	Stakeholder Group	Function	First Name	Name
MAV Co.	Rail	Deputy CEO	László	Pál
		Director	Károly	Tulik
		Head of Unit	Ando	Janos
Rail Capacity Allocation Office (VPE)	Rail	Head of department	László	Pósalaki
Győr-Sopron-Ebenfurt Railways (GYSEV)	Rail	CEO	Szilárd	Kövesdi
			Mosoczi	Andrea
ÉDUVIZIG	Inland Waterway	Shipping Expert	Pál	Kötél
Hungarian Federation of Inland Ports	Inland ports	President	Béla	Szalma

Slovakia

Name of Institution (English)	Stakeholder Group	Function	First Name	Name
Railways of Slovak Republic (ZSR)	Rail		Miroslav	Garaj
Waterborne Transport Development Agency (ARVD)	Inland Waterway		Martin	Boroš
Public Ports JSC	Inland ports	General Manager and Chairman of the Management Board	Jozef	Moravčík
		Head of development and project management	Slavomir	Kollar

Croatia

Name of Institution (English)	Stakeholder Group	Function	First Name	Name
Rail not relevant				
Agency for Inland Waterways	Inland Waterway	Director	Zrinko	Zvocak
Port Authority Slavonski Brod	Inland ports	Director	Marijan	Jurić
Port Authority Vukovar	Inland ports	Director	Božana	Matoš

Bulgaria

Name of Institution (English)	Stakeholder Group	Function	First Name	Name
Rail not relevant				
Executive Agency Exploration and Maintenance of the Danube River (EAEMDR)	Inland Waterway	~~Executive Director~~	~~Georgi~~	~~Georgiev~~
		Executive Director	Pavlin	Zdravkov Tsonev
Bulgarian Maritime Administration Executive Agency	Inland Waterway	Executive Director	Zhivko	Petrov
Bulgarian Ports Infrastructure Company (BPI Co)	Inland ports	Director-General	Anguel	Zabourtov
Port Complex Ruse J.S.Co.	Inland ports	~~Executive Director~~	~~Nikolay~~ Petar	~~Naydenov~~ Dragoshinov
Port of Vidin Ltd.	Inland ports	Director	Ivo	Ivanov

Romania

Name of Institution (English)	Stakeholder Group	Function	First Name	Name
National Railway Company "CFR" SA	Rail	Manager	Macarie Alexandru	Moldovan
Ministry of Transport	Inland Waterway	General Directorate of Infrastructure and Naval Transport	Cristina	Cuc
River Administration of the Lower Danube Galati	Inland Waterway	Director	Mircea Răzvan	Cristea
National Company Administration of Maritime Danube Ports, Galati	Inland ports	Director	Luigi	Ciubrei
National Company Administration of River Danube Ports Giurgiu	Inland ports	Director	Cristian	Matei
National Company for Maritime Ports Administration Constanta SA	Maritime ports	Director	Valeriu	Ionescu
		Head of International Affairs	Cristiana	Racautanu
Union of Romanian Inland	Maritime	Expert	Carmen	Costache

Ports	ports	Mariana	

Rebublic of Serbia

Name of Institution (English)	Stakeholder Group	Function	First Name	Name
Ministry of Transport, Directorate for Inland Waterways (Plovput)	Inland Waterway	Director	Ljubiša	Mihajlović
Port Governance Agency	Inland ports	Planning and design manager	Milan	Radović

Moldova

Name of Institution (English)	Stakeholder Group	Function	First Name	Name
Giurgiulesti International Free Port	Inland ports		Thomas	Moser

Transnational

Name of Organisation (English)	Stakeholder Group	Function	First Name	Name
Danube Commission	Inland Waterway	Director-General	Petar	Margić
		Chief Engineer	Horst	Schindler
International Sava River Basin Commission	Inland Waterway		Komatina	Dejan

INFRASTRUCTURE MANAGER – ROAD, AIRPORTS

France

Name of Institution (English)	Stakeholder Group	Function	First Name	Name
	Road	represented through the Ministry and dealt within the Rhine-Alpine Corridor		

Germany

Name of Institution (English)	Stakeholder Group	Function	First Name	Name
Bundesministerium für Verkehr und digitale Infrastruktur	Road	represented through UI 23		
German Airports Association (ADV)	Airport		Markus	Engemann
Aiport Stuttgart	Airport		Wolfgang	Müller
Airport Nuremberg	Airport		Michael	Hupe
			Andreas	Humer-Hager
Fraport AG Frankfurt Airport Services Worldwide	Airport		William	Ament
Airport München	Airport		Anna	Genzel

Austria

Name of Institution (English)	Stakeholder Group	Function	First Name	Name
ASFINAG - Motorway Operator	Road		Klaus	Schierhackl
			Alois	Schedl
			Andreas	Fromm
Vienna International Airport	Airport	Senior Vice President Operations	Nikolaus	Gretzmacher
			Franz	Jöchlinger

Czech Republic

Name of Institution (English)	Stakeholder Group	Function	First Name	Name
Road and Motorway Directorate of the Czech Republic	Road	Director of Section for Planning and Realization of Constructions	Tomáš	Čížek
Czech Aeroholding	Airport	Senior Executive Director of Properties Management and Development	Jiří	Kraus

Hungary

Name of Institution (English)	Stakeholder Group	Function	First Name	Name
	Road	represented through Ministry of National Development		
Budapest Airport Zrt.	Airport	CEO	Jost	Lammers

Slovakia

Name of Institution (English)	Stakeholder Group	Function	First Name	Name
National Motorway Company	Road		Daniela	Okuliarová
Slovak Road Administration	Road	Department of transport planning	Vladimír	Kollár
Airport Bratislava	Airport	Chairman & Chief Executive Officer	Ivan	Trhlík

Croatia

Name of Institution (English)	Stakeholder Group	Function	First Name	Name
Croatian Motorways Maintenance and Toll Payment Ltd.	Road	President of the Board	Davor	Mihovilić

Bulgaria

Name of Institution (English)	Stakeholder Group	Function	First Name	Name
Road Infrastructure Agency	Road	Head of Department	Hristo	Petrov
National company "Strategic Infrastructure Projects"	Road	Executive Director	Asen	Antov

Romania

Name of Institution (English)	Stakeholder Group	Function	First Name	Name
National Company for Highways and National Roads in Romania	Road	General Director	Narcis	Neaga
Arad International Airport	Airport	General Director	Traian	Bălăcel
"Traian Vuia" Timisoara International Airport	Airport	General Director	Iulian Daniel	Idolu
Airport Bucuresti	Airport	General Director	Sorniel	Ciobanu

REGIONAL AUTHORITIES

France

Name of Institution (English)	Function	First Name	Name
La Maison de la Région Alsace	represented through the Ministry and dealt within the Rhine-Alpine Corridor		
Ville et Communauté urbaine de Strasbourg	represented through the Ministry and dealt within the Rhine-Alpine Corridor		

Germany

Name of Institution (English)	Function	First Name	Name
Bavarian Ministry of the Interior, Building and Transport - Oberste Baubehörde	Ministerialdirigentin	Ingrid	Simet
Hessian Ministry of Economic Affairs, Energy, Transport, Development	Ministerialdirigent	Bernhard	Maßberg
Baden Württemberg: Ministry of Transport and Infrastructure	Ministerialdirigent	Elmar	Steinbacher

Austria

Name of Institution (English)	Function	First Name	Name
common liaison department of Austrias nine regions: Verbindungsstelle der Bundesländer beim Amt der NÖ Landesregierung			

Czech Republic

Name of Institution (English)	Function	First Name	Name
Association of Regions	Governor of Olomouc Region, acting on behalf of the Association	Jiří	Rozbořil

Hungary

Name of Institution (English)	Function	First Name	Name
Megyei Önkormányzatok Országos Szövetsége (Association of County Municipalities)	president	Lajos	Szűcs
Megyei Jogú Városok Szövetsége (Association of County-right Towns)	managing director	Erika	Papp

Slovakia

Name of Institution (English)	Function	First Name	Name
Bratislava Self-Governing Region	Director of the Department of Transport	Ladislav	Csáder
Nitra Self-Governing Region	Department of Transports and Land Communications	Ján	Výboch
Trnava Self-Governing Region	Department of Transport Policy - Director	Alexandra	Silberhorn

Bulgaria

Name of Institution (English)	Function	First Name	Name
North-Western Planning Region	Regional Governor of Vidin, Chairman of the Regional Development Council North-Western Planning Region	Krastyo	Spasov
North-Central Planning Region	Regional Governor of Ruse, Chairman of the Regional Development Council North-Central Planning Region	Ventsislav	Kalchev
North-Eastern Planning Region	Regional Governor of Dobrich, Chairman of the Regional Development Council North-Eastern Planning Region	Nedko	Marchev
National Association of Municipalities in the Republic of Bulgaria	Mayor of Silistra Municipality	Yulian	Naydenov

Romania

Name of Institution (English)	Function	First Name	Name
South - West Region Development Agency	Director	Marilena	Bogheanu
West Region Development Agency	Director	Sorin	Maxim
Center Development Agency	Director	Simion	Crețu
South Muntenia Development Agency	Director	Liviu	Mușat
South East Development Agency	Director	Luminița	Mihailov
Bucuresti Ilfov Region Development Agency	Director	Dan	Nicula
Regional Office for Cross-Border Cooperation Romania-Hungary	Executive Director	Livia	Banu

ANNEX II – LIST OF PROJECTS

RAIL PROJECTS

ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
	Rail, IWW, Inland port, Seaport, Rail-Road Terminal, Road, Airport	*Location of project*	*Indicate study or work*	*Short description of project*	*Identify project leader*	*Year - year*	*Including information on sources of financing*	*Main financing sources; envisaged financing sources for future projects*		

ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
DE1	Rail	Kehl-Appenweier	Work	''ABS Kehl–Appenweier (POS-Süd)'': Main objective: Part of high-speed connection Paris-Eastern France-South-West Germany (Paris-Ostfrankreich-Süddeutschland (POS)) Measures included: - Alignment optimisation (max. speed = 160-180 km/h) - New connection Appenweier to Karlsruhe-Basel line - New double track bridge across the River Rhine - Adjustment Kehl station	BMVI (Beneficiary) DB Netz AG (Implementing body)	open	173.00	**Financed*** 146.05 / Federal budget, 26.95 / TEN-T-Multi-Annual Programme	X	X
DE2	Rail	Appenweier-Karlsruhe	Work	''ABS/NBS Karlsruhe–Offenburg–Freiburg–Basel (1. und 2. Baustufe)'' Main objective: Decrease travelling and transport times, elimination of bottlenecks, optimise connection to NEAT (Switzerland) Measures included (only section Karlsruhe-Appenweier): - Upgrade Karlsruhe-Durmersheim to 160 km/h - New 2 track line Durmersheim-Rastatt (max. speed = 250 km/h) - Rastatter Tunnel	BMVI (Beneficiary) DB Netz AG (Implementing body)	2013-2022	Unknown (included in budget for ABS/NBS Karlsruhe – Basel)	Federal budget / TEN-T Multi-Annual Programme	X	X

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ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
DE3	Rail	Mannheim node	Work	''Node Mannheim (2. stage)'': Measures included: (1) Additional platform Mannheim Hbf (2) New rail bridge Mannheim Friedrichsfeld Süd (3) Update Heidelberg-Wieblingen - Heidelberg Hbf (4 tracks) (4) Ludwigshafen: Separation of freight traffic (5) Infrastructure expansions in Mainz, Wiesbaden, Karlsruhe	BMVI (Beneficiary) DB Netz AG (Implementing body)	(1) 2014-2017; (2)-(5) open	160.00	**Financed*** Federal budget		X
DE4	Rail	Mannheim - Frankfurt/Main	Work	''NBS Rhein/Main–Rhein/Neckar'': Main objectives: - Close gaps in European high speed network, - Shortening of travel and transport times, - Acquisition of additional traffic volume on destinations between Cologne, Frankfurt/M., Stuttgart and München, - Removal of passenger/freight bottlenecks between Mannheim and Frankfurt/M. Measures included: - New 2 track high speed line (300 km/h) Zeppelinheim-Mannheim - Connection of Darmstadt main station - Connection to existing line Mannheim - Stuttgart	BMVI (Beneficiary) DB Netz AG (Implementing body)	open	2,183.00	**Financed*** Federal budget TEN-T Multi-Annual Programme		X

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ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
DE5	Rail	Frankfurt/Main node	Work	''Node Frankfurt (1. and 2. stage)'': (1) 1. upgrade phase Frankfurt Station station - Rearrangement of train routings, - Optimisation of tracks, - New signal tower - Optimsation of traffic flows (2) 2. upgrade phase Frankfurt Station station - 2 additional tracks for long haul traffic between Station station and Gutleuthof junction (incl. 3rd Niederräder bridge) - Grade-separated connection of Niederrad-Forsthaus line section - Separation of traffic flows between Frankfurt main station and Frankfurt Stadion station (3) Galluswarte junction: Additional switch and 2nd track (4) further measures (not yet specified)	BMVI (Beneficiary) DB Netz AG (Implementing body)	(1)2005-2008; (2) 2008-2023; (3) 2011-2013; (4) open	(1) 78.00 (2) 193.00 (3) 6.00 (4) 634.00	**Financed*** Federal budget		X
DE6	Rail	Frankfurt/Main node	Study	''Construction of the underground line section and the "Frankfurt (M) Gateway Gardens / Flughafen Terminal 2" station - Ensuring the sustainability of intermodal transport links at Frankfurt Airport'': The study advances the new construction of the S-Bahn line between Frankfurt Airport and its main train station, including a new S-Bahn station "Gateway Gardens" located at the airport's Terminal 2.	City of Frankfurt am Main	2013 - 2014	3.50	**Financed** 1.75 / City of Frankfurt/M; 1.75 / TEN-T Annual Programme	X	X

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ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
DE7	Rail	Hanau-Nantenbach	Work	''ABS/NBS Hanau–Nantenbach'': Main objectives: - Improvement of rail axis Frankfurt/Main-Nurnberg, - Elimitation of restrictions for intermodal gauge, - Elimination of capacity restraints in section Laufach-Heigenbrücken. Measures included: - New 2track bypass of Laufach-Heigenbrücken section - Upgrading to standard gauge - Abandoning of existing Schwarkopf tunnel - Modernisation of signal technique between Lohr and Aschaffenburg - Upgrade/new construction of platforms in Partenstein, Heigenbrücken, Laufach and Hösbach stations	BMVI (Beneficiary) DB Netz AG (Implementing body)	2013 - 2017	421.00	**Financed*** Federal budget		
DE8	Rail	Stuttgart node	Work	''Stuttgart 21'': New construction of Stuttgart main station	DB Netz AG	unknown - 2021	5,987.00	**Financed*** Deutsche Bahn AG German federal state budget (incl. EU funding) State Baden-Württemberg City of Stuttgart Stuttgart airport Stuttgart regional association	X	X

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ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
DE9	Rail	Stuttgart–Ulm–Augsburg	Work	''ABS/NBS Stuttgart–Ulm–Augsburg'': Main objectives: - Decrease of travel/transport times between Western Europe and Southern Europe, - Increase of rail capacity between Stuttgart and Ulm, - Enhancement of service quality of regional and local rail services. Measures included: - New high-speed rail line Wendlingen-Ulm, max. speed = 250 km/h (incl. upgrade Danube bridge "Filstalbrücke"), - Connection of high-speed rail line Wendlingen-Ulm to the new Stuttgart main station and the new station of Neu-Ulm), - Upgrade of existing line Ulm-Augsburg, max. speed = 200 km/h.	BMVI (Beneficiary) DB Netz AG (Implementing body)	unknown - 2021	3,669.20	**Financed*** 3,453.28 / Federal budget 215.92 /TEN-T-Multi-Annual Programme		X
DE10	Rail	Augsburg-München	Work	''ABS Augsburg-München'': Main objectives: - Improvement of rail connections between Western and Southern Germany, - Part of European main line Paris-Budapest, - Enhancement of service quality of long distance, regional and local rail services. Measures included: - Enhancement max. speed to 230 km/h, - 2 additional tracks between Augsburg Hbf and Olching, - Separation of long/short distance passenger traffic and freight transport.	BMVI (Beneficiary) DB Netz AG (Implementing body)	unknown - 2011	725.00	**Financed*** Federal budget		X

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ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
DE11	Rail	München node	Work	''Node München (2. stage)'': Measures included: - Upgrade Daglfing - Johanniskirchen (4 tracks) - Expansion Pasing station - Upgrade Truderinger Spange (2 tracks) - Adjustment connection of München-Riem - Daglfinger Kurve	BMVI (Beneficiary) DB Netz AG (Implementing body)	- open	368.00	**Financed*** 368 / Federal budget	X	X
DE12	Rail	München-Mühldorf-Freilassing	Work	''ABS München-Mühldorf-Freilassing'': Main objectives: - Enhancement of rail capacity between Germany and Austria, - Enhancement of rail capacity and quality of freight traffic for the "Chemical Triangle", - Improvement of regional passenger traffic in South-East Bavaria. Measures included: 1. Phase: - Electrification of the entire line - Partially upgrade to double track line - New control centre Burghausen - New construction of Truderinger curve 2. Phase: - Upgrade to 3-track line between Freilassing and border DE/AT	BMVI (Beneficiary) DB Netz AG (Implementing body)	- open	1,386.00	**Financed*** 1,369.42 /Federal budget; 8.54 /TEN-T-Multi-Annual Programme; 8.04 /TEN-T Annual Programme 2008/09		X

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ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
DE13	Rail	München Flughafen - Erding	Study	''New railway connection between München Airport and the European railway corridor TEN PP 17'': Main objectives: New railway connection from the airport towards the east, in the direction of Erding (connection to München-Mühldorf-Salzburg line) Measures included: Planning phases: preliminary design, final design up to the building permission application, building permission procedures for the following sections: a) München Airport – Erding („Erdinger Ringschluss") b) Erding – Walpertskirchen („Walpertskirchener Spange")	Bayerisches Staatsministerium für Wirtschaft, Infrastruktur, Verkehr und Technologie	2012 - 2015	25.00	**Financed*** 12.5 / State of Bavaria; 12.5 / TEN-T Annual Programme		X
DE14	Rail	Nürnberg–Marktredwitz–Schirnding-Border DE/CZ	Work	''ABS Nürnberg – Marktredwitz – Reichenbach/BGr DE/CZ (–Praha)'': Main objectives: - Decrease of travel times by use of tilting technology, - Enhancement of rail quality by electrification, - Providing alternative routes for long-haul freight traffic. Measures included: - Electrification of the lines Nürnberg-Marktredwitz-Hof-Reichenbach and Marktredwitz-Border DE/CZ - Tilting technology between Marktredwitz and Border DE/CZ	BMVI (Beneficiary) DB Netz AG (Implementing body)	open	467.00	**Financed*** Federal budget	X	X

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ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
DE15	Rail	Entire German corridor network	Work	Prolongation of sidings for 740m trains	DB Netz AG	To be defined	TBD	**To be defined**	X	
DE16	Rail	Entire German corridor network	Work	Upgrade and Modernisation of bridges	DB Netz AG	To be defined	TBD	**To be defined**	X	

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ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
DE17	Rail	Entire German corridor network	Work	Upgrade and Modernisation of electronical interlockings	DB Netz AG	To be defined	TBD	**To be defined**	X	

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ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
SK1	Rail	State border CZ/SK – Čadca – Krásno nad Kysucou	Work	''Modernisation of railway corridor VI State border CZ/SK – Čadca – Krásno nad Kys.'': Modernisation of 17 km long section of the main line: - Interoperability (ETCS) and TSI parameters, - Speed increase and travel time savings	SR	2019 - 2022	300.00	Cohesion fund + CEF funding envisaged	X	X
SK2	Rail	Púchov – Žilina, section Púchov - Považská Teplá	Work	''Modernisation of railway line Púchov – Žilina for maximum track speed of 160 km/h, section Púchov – Považská Teplá '': (1) Modernisation of 16 km long section of the main line: - Interoperability (ETCS) and TSI parameters, - Speed increase (160 km(h) and travel time savings. (2) Straightened track alignment with new tunnels and bridges	SR	2016 - 2019	300.00	CEF funding envisaged	X	X
SK3	Rail	Púchov – Žilina, section Považská Teplá – Žilina	Work	''Modernisation of railway line Púchov – Žilina for maximum speed of 160 km/h., section Považská Teplá – Žilina, 2nd phase': (1) Modernisation of 23 km long section of the main line: - Interoperability (ETCS) and TSI parameters, - Speed increase (160 km/h) and travel time savings. (2) 2nd phase of the project, 1st phase within OPT 2007-2013	SR	2015 - 2016	80.50	Cohesion fund funding envisaged	X	X

ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
SK4	Rail	Žilina – Teplička, Žilina node	Work	''Modernisation of railway line Žilina – Teplička, project documentation + construction'': (1) Modernisation of 14 km long section of the main line (Interoperability (ETCS) and TSI parameters) (2) Modernisation of the passenger railway station Žilina (3) Reduction of the marshalling yard + related infrastructure in the node	SR	2018 - 2020	360.00	Cohesion fund funding envisaged		X
SK5	Rail	Žilina – Košice, section Paludza – Liptovský Hrádok	Work	''Modernisation of railway line Žilina – Košice, section Lipt. Mikuláš – Poprad-Tatry (beyond), implementation phase Paludza – Lipt. Hrádok'': Implementation phase Paludza – Liptovský Hrádok: Modernisation of 12/15 km long section of the main line: - Interoperability (ETCS) and TSI parameters, - Speed increase and travel time savings	SR	2016 - 2019	500.00	CEF funding envisaged		X
SK6	Rail	Žilina – Košice, section Lučivná - Poprad-Tatry	Work	''Modernisation of railway line Žilina – Košice, section Lipt. Mikuláš – Poprad-Tatry (beyond), implementation phase Poprad-Tatry – Lučivná'': Implementation phase Poprad-Tatry - Lučivná: Modernisation of 15 km long section of the main line: - Interoperability (ETCS) and TSI parameters, - Speed increase and travel time savings	SR	2016 - 2018	143.00	CEF funding envisaged		X

ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
SK7	Rail	Žilina – Košice, section Poprad-Tatry - Spišská N. Ves	Work	''Modernisation of railway line Žilina – Košice, section Poprad-Tatry (beyond) – Krompachy, implement. phase Spišská N. Ves – Poprad-Tatry'': Implementation phase Spišská N. Ves – Poprad-Tatry : Modernisation of 25 km long section of the main line: - Interoperability (ETCS) and TSI parameters - Feasible speed increase and travel time saving - Essential alignment changes	SR	2018 - 2020	TBD	Cohesion fund funding envisaged		X
SK8	Rail	Žilina – Košice, section Kysak – Košice	Work	''Modernisation of railway line Žilina – Košice, section Kysak – Košice'': Modernisation of 13 km long section of the main line: - Interoperability (ETCS) and TSI parameters - Feasible speed increase and travel time saving - Essential alignment changes	SR	2018 - 2020	TBD	Cohesion fund funding envisaged		X
SK9	Rail	Čierna nad Tisou node	Work	''Modernisation of railway node Čierna nad Tisou'': (1) Modernisation of the transhipment terminal on UA borders: - Reduction of reception and departure sidings, - Mitigation of environmental burdens + noise (2) Modernisation of the passenger station	SR	2018 - 2019	120.00	Cohesion find + CEF funding envisaged		X

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
SK10	Rail	Bratislava node	Study	''Railway node Bratislava (Feasibility study + Project documentation)'': (1) Modernisation of the railway infrastructure in the node Bratislava: - Elimination of operation and infrastructure bottlenecks - Interoperability (ETCS) and TSI parameters - Interlockings + enhancement of safety on level crossings (2) Creation of conditions for better operation of railway transport (3) Improvement of accessibility for commuter rail transport	SR	unknown -> 2020	1.50	Cohesion fund + CEF funding envisaged	X	X
AT1	Rail	Wien Central Railway Station (Wien Hbf)	Work	''Wien Central Railway Station (Wien Hbf) '': Main objectives: Creating a high-performance north-south and east-west connection and establish new through station Wien Hbf as an important hub for regional, national, and international transport at a main junction within the trans-European rail network. Measures included: New Wien Central Railway Station (Wien Hbf) including reconstruction of Südtirolerplatz - new station Wien Hbf - railway infrastructure (ca. 6.7 km railway line: 100 km tracks, ca. 300 switches, new bridges, noise protection measures)	ÖBB-Infrastruktur AG	2007 - 2015	1,014.90	**Financed** Federal budget City of Wien TEN-T Annual Programme Rail Infrastructure Budget, Private(Real estate	X	X

ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
AT2	Rail	Wien – St. Pölten (new high speed line)	Work	''Wien – St. Pölten new high speed line'': Main objectives: Build a part of the 4-track railway line Wien - Salzburg "Westbahn" to extend capacity for passenger and freight trains on this 300 km stretch of the TEN-T Rhine-Danube corridor. Enable line section for high speed traffic. Measures included: Construction of the new high speed line between Wien and St. Pölten.	ÖBB-Infrastruktur AG	unknown - 2015	1,519.20	**Financed** Federal budget	X	X
AT3	Rail	St. Pölten (freight train line)	Work	''St. Pölten freight train line'': Main objectives: Build a part of the 4-track railway line Wien - Salzburg "Westbahn" to extend capacity for passenger and freight trains on this 300 km stretch of the TEN-T Rhine-Danube corridor. Relief St Pölten city centre and railway station from freight and through traffic. Measures included: New construction of a by-pass line St Pölten - Loosdorf for freight trains with max line speed of 120 km/h.	ÖBB-Infrastruktur AG	unknown - 2018	803.80	**Financed** Federal budget	X	X
AT4	Rail	St. Pölten (Railway station)	Work	''St. Pölten Railway station'': Main objectives: Upgrade railway station St Pölten on the railway line Wien - Salzburg "Westbahn". Measures included: Modernisation of the railway station St. Pölten, planning and construction	ÖBB-Infrastruktur AG	unknown - 2015	179.00	**Financed** Federal budget	X	X

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
AT5	Rail	Ybbs/Donau - Amstetten (Westbahn)	Work	''Westbahn: Ybbs/Donau - Amstetten'': Main objectives: Build a part of the 4-track railway line Wien - Salzburg "Westbahn" to extend capacity for passenger and freight trains on this 300 km stretch of the TEN-T Rhine-Danube corridor. Enable line section for high speed traffic. Measures included: Design and planning, construction of the high speed section between Ybbs/Donau and Amstetten, extension to 4 tracks, including modernisation of the railway station Amstetten	ÖBB-Infrastruktur AG	unknown - 2019	488.40	**Financed** Federal budget		X
AT6	Rail	Asten - Linz (Westbahn)	Work	''Westbahn Asten - Linz'': Main objectives: Build a part of the 4-track railway line Wien - Salzburg "Westbahn" to extend capacity for passenger and freight trains on this 300 km stretch of the TEN-T Rhine-Danube corridor. Measures included: Design, planning and works of the high speed line between Asten and Linz, extension to 4 tracks	ÖBB-Infrastruktur AG	2012 - 2025	542.40	**Financed** Federal budget		X
AT7	Rail	Linz - Wels (Westbahn)	Work	''Westbahn Linz - Wels'': Main objectives: Build a part of the 4-track railway line Wien - Salzburg "Westbahn" to extend capacity for passenger and freight trains on this 300 km stretch of the TEN-T Rhine-Danube corridor. Measures included: Design, planning and construction of the high speed section Linz – Wels , extension to 4 tracks	ÖBB-Infrastruktur AG	2012-> 2025	996.80	**Financed** Federal budget		X

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
AT8	Rail	Lambach - Breitenschützing (Westbahn)	Work	''Westbahn Lambach - Breitenschützing'': Main objectives: Build a part of the 4-track railway line Wien - Salzburg "Westbahn" to extend capacity for passenger and freight trains on this 300 km stretch of the TEN-T Rhine-Danube corridor. Measures included: Line improvement on a 4km section to eliminate speed reductions on the high speed line Lambach-Breitenschützing; extension of line speed to 200 km/h.	ÖBB-Infrastruktur AG	2012 - 2014	41.80	**Financed** Federal budget	X	X
AT9	Rail	Attnang-Puchheim (Westbahn railway station)	Work	''Westbahn railway station Attnang-Puchheim'': Main objectives: Upgrade railway station Attnang-Puchheim on the railway line Wien - Salzburg "Westbahn". Measures included: Modernisation of railway station Attnang-Puchheim: - new station building and surrounding infrastructure - reconstruction of station tracks	ÖBB-Infrastruktur AG	2012 - 2015	28.50	**Financed** Federal budget		X
AT10	Rail	Wels – Passau (DE) (AT)	Work	''Wels – Passau (DE)'': Main objectives: Extend capacity on the important North-South corridor between Austria and Germany. Measures included: Design, planning and upgrading of the existing section Wels – Passau including railway station modernisation and implementation of ETCS L2	ÖBB-Infrastruktur AG	2012 - 2019	213.70	**Financed** Federal budget		X

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
AT11	Rail	Linz - Linz Stadthafen	Work	''Linz rail connection to Linz Stadthafen'': Planning and construction of traffic control system ESTW towards the port of Linz	ÖBB-Infrastruktur AG	2016 -2020	42.10	**Financed** Federal budget		X
AT12	Rail	Salzburg (railway station)	Work	Modernisation of railway station Salzburg Modernisation of the railway station Salzburg	ÖBB-Infrastruktur AG	2012 - 2015	233.90	**Financed** Federal budget		X
AT13	Rail	Steindorf bei Straßwalchen - Neumarkt-Köstendorf - Salzburg (Westbahn)	Study	''Westbahn Steindorf bei Straßwalchen - Salzburg'': Planning and evaluation of different alignment of new railway line	ÖBB-Infrastruktur AG	unknown - 2016	20.20	TBD		X
AT14	Rail	Neumarkt-Köstendorf - Salzburg (Westbahn)	Work	''Westbahn Neumarkt-Köstendorf - Salzburg'': Design, planning and construction of the high speed section Köstendorf - Salzburg , extension to 4 tracks	ÖBB-Infrastruktur AG	unknown - 2032	1,650.00	TBD		X

ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
AT15	Rail	Salzburg – Freilassing (Westbahn)	Work	''Westbahn Salzburg – Freilassing (DE)'': Main objectives: The aim of this project is the removal of an important bottleneck located in a cross-border section on the Priority Project 17 railway axis Paris-Strasbourg-Stuttgart-Wien-Bratislava. Measures included: Upgrading of the railway line between Salzburg Rwst Salzburg and Freilassing for improvement of commuter/short distance traffic: - third track - replacing all bridges in the section - in particular the bridge crossing the Saalach river. - upgrading overall technical standards for communication, security and catenaries of the track - adaptation of the stations (Salzburg Main Station, Aiglhof, Mülln-Altstadt, Taxham)	ÖBB-Infrastruktur AG	2010 - 2017	181.10	**Financed** 114.92/Federal budget 37.88 /TEN-T Multi-Annual Programme 28.3 /Regional funding		X
AT16	Rail	Wien – Hegyeshalom	Work	''Wien – Hegyeshalom (HU)'': Integration of ETCS Level 2 including GSM-R along Wien – Hegyeshalom segment	ÖBB-Infrastruktur AG	> 2018->2019	TBD	TBD		X
AT17	Rail	Wien – Hegyeshalom	Study	''Wien – Hegyeshalom (HU)'': Study Project on ETCS Upgrade Variant (L1 with new baseline or L2)	ÖBB-Infrastruktur AG	2014 - 2015	TBD	TBD		X
AT18	Rail	Wien Central Marshalling yard (Wien ZvBF), Laaerberg Tunnel; Kledering-Achau	Work	Optimization of Freight Rail traffic around Wien Central Marshalling yard (Wien ZVBF), Laaerberg Tunnel; Kledering-Achau	ÖBB-Infrastruktur AG	> 2019 - 2027	TBD	**Financed** State rail infrastructure budget		X

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AT19	Rail	Airport Schwechat – Long distance rail connection to Bratislava/Budapest	Study	''Airport Schwechat – Long distance rail connection to Bratislava/Budapest'': Main objectives: After stopping Götzendorf clip study (connecting Airport and Eastern line near Götzendorf), a further alternative shall be analysed to connect Wien Airport. Measures included: Line variant study to integrate the Airport Station into long distance passenger rail Wien – Bratislava / Budapest and to increase capacity of existing line Wien – Parndorf – Border AT/SK/HU	ÖBB-Infrastruktur AG, PGO	unknown - 2014/2015	5.80	TBD		X
AT20	Rail	Wien - Bratislava (Wien node)	Study/Work	''Works and studies for upgrading the Wien-Bratislava railway line (6 sub-projects)'': This project includes both studies and works for each of the three sub-projects in greater Wien: - connection of new Wien's Central railway station to East, West and South railway stations (6 km), merging all of the railway lines (north, south, east, west) in a new through station, the Wien Central railway station - Kledering loop: connection between Wien's Central railway station and Wien Airport by connecting the east railway line to the airport suburban railway line (2 km) - Götzendorf clip: studies on the future double track construction connecting the airport to the East railway station and further to Bratislava (14.2 km)	ÖBB-Infrastruktur AG	2007 - 2015	846.60	**Financed** 118.78 / TEN-T Multi-Annual Programme Other contributors	X	X
AT21	Rail	Lines of the Austrian A-network	Work	ETCS and automatic train control system on lines of Austrian A-network.	ÖBB-Infrastruktur AG	2012 - 2019	221.00	**Financed** Federal budget		X

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EU1	Rail	ERTMS corridors B, D, E (AT, DE, HU, CZ, SI)	Work	''ETCS on-board equipment (corridor B, D, E)'': Retrofitment of 7 locomotives "2143" and 5 locomotives "ES64U4" with ETCS Level 2, Baseline 2, Release 2.3.0d. The Action also includes field and off-site tests to demonstrate compatibility between the on board equipment and Austrian, German, Hungarian, Czech Republic and Slovenian 2.3.0d lines.	- CargoServ GmbH - RTS Rail Transport Service GmbH - Adria Transport	2013 - 2015	3.11	**Financed** 1.555mn / TEN-T Multi-Annual Programme 1.555mn / Action promoters	X	
EU2	Rail	Lines between Breclav, Wien, Bratislava, Budapest, Arad	Work	''ERTMS deployment on Corridor E (Dresden-Constanta) Austrian vehicles'': Achieve railway interoperability on a significant section of the ERTMS Corridor E by retrofitting a certain number of freight locomotives with ETCS onboard units.	Beneficiary: Ministry of Transport Implementing body: ÖBB	2009 - 2013	14.55	**Financed** 7.725mn / National budget 7.725mn / TEN-T Multi-Annual Programme	X	

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
EU3	Rail	Rail network of BE, ES, DE, FI, IT, AT, FR, UK, DK, SE, PL	Study	Facilitating and speeding up ERTMS deployment	- EEIG ERTMS Users Group - Union of European Railway Industries (UNIFE) - Centro de estudios y experimetatión de obras públicas - Multitel - Deutsches Zentrum für Luft-und Raumfahrt - Nokia Siemens Networks Oy - Kapsch Carriercom Deutschland GmbH - Siemens Plc - Hörmann Funkwerk Kölleda GmbH - Alstom Ferroviaria Spa - Selex Elsag Spa - UIC - Ingenieria y Economia del Transporte, S.A. - Frequentis AG - MER MEC S.p.A. - Seinalia SL	2011-2014	30.00	**Financed** 15.0mn / TEN-T Multi-Annual Programme 15.0mn / Action promoters	X	X
AT22	Rail	HU/AT border station Hegyeshalom (AT, HU)	Work	Developing operational and legal conditions to run cross-border freight and passenger trains between Austria and Hungary without stop at Hegyeshalom border station. (Needs governmental agreement)	ÖBB, NIF, MoT HU, MoT AT	open	TBD	TBD	X	X
AT23	Rail	Lines of the ÖBB A-network	Work	Implementation of GSM-R on Austrian A-network	ÖBB-Infrastruktur AG	2010 - 2014	82.00	**Financed** Federal budget	X	X

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AT24	Rail	Wien Hbf - Wien Airport line	Work	''Connection Ostbahn – Flughafenschnellbahn near Kledering with Wien Central Station'': Main objectives: Enabling access of Wien Airport railway station to the line Wien-Bratislava	ÖBB-Infrastruktur AG	2012-2016	63.10	**Financed** Federal budget		X
AT25	Rail	Wien Airport	Work	Main objectives: Adaptation of Passenger Rail Station for long-distance passenger trains Measures included: - Extension of platforms to 420m - New station access building (Mitte-West)	ÖBB-Infrastruktur AG / Flughafen Wien	2012-2014	118.80	**Financed** Federal budget		X

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
HU1	Rail	Entire Hungarian corridor network	Study	Upgrading the railway lines and eliminating bottlenecks of Hungarian Railways' (MÁV) - preparation	Hungarian government	2014-2015	16.12	ITOP Cohesion Fund	X	X
HU2	Rail	Entire Hungarian corridor network	Work	Improving transport safety of MÁV (II. phase)	Hungarian government	2015-2017	58.37	ITOP Cohesion Fund		
HU3	Rail	Entire Hungarian corridor network	Work	Maintaining software and IT application development for infrastructure and fleet management.	Hungarian government	2014-2015	10.32	ITOP Cohesion Fund		
HU4	Rail	Rajka - Hegyeshalom	Work	Procurement of 10 electric multiple units for GYSEV lines	Hungarian government	2015-2017	59.66	ITOP Cohesion Fund		
HU5	Rail	Rajka - Hegyeshalom	Work	Improving transport safety of GYSEV (II.a. phase)	Hungarian government	2014-2015	4.19	ITOP Cohesion Fund		
HU6	Rail	Rajka - Hegyeshalom	Work	Hegyeshalom–Rajka ETCS	GYSEV	2013-2015	2.1	Financed	X	X
HU7	Rail	Hegyeshalom (HU-AT border) - Budapest - Lőkösháza (HU - RO border)	Work	GSM-R implementation 1st phase on 935 km long railway lines namely: between Hegyeshalom (HU-AT border) - Budapest - Lőkösháza (HU - RO border), Hodos (SI - HU border) and Boba and Győr, Budapest and Székesfehérvár, Sopron, Szombathely and Szentgotthárd	Hungarian government	2013-2015	15.16	ITOP/IKOP Cohesion Fund	X	X
HU8	Rail	Hegyeshalom - Budapest-Kelenföld Tata - Biatorbágy	Work	Biatorbágy - Tata upgrade, and ETCS2 implementation of Budapest - Hegyeshalom lines.	Hungarian government	2017-2020	403.1	CEF	X	X
HU9	Rail	Tatabánya - Budapest Budapest node	Work	Procurement of 21 electric multiple units (200 passengers capacity/unit) for Budapest and Tatabánya, Budapest and Füzesabony and Eger, Budapest and Veszprém, Budapest and Siófok and inner Budapest lines	Hungarian government	2015-2016	124.8	ITOP Cohesion Fund		

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
HU10	Rail	Budapest node	Work	Upgrade of Budapest Southern Danube Railway Bridge	Hungarian government	2016-2018	112.87	CEF	X	X
HU11	Rail	Budapest node	Work	Building the railway connections of Budapest Liszt Ferenc Airport	Hungarian government	2019-2020	145.11	CEF	X	
HU12	Rail	Budapest - Cegléd - Szolnok	Work	Procurement of 50 electric multiple units (300 passengers capacity/unit for traffic between Budapest and Cegléd and Szolnok, and between Budapest and Vác)	Hungarian government	2015-2017	441.79	ITOP Cohesion Fund		
HU13	Rail	Budapest - Gyoma	Work	Budapest–Gyoma ETCS level 2 implementation	NIF	2013-2015	90.61	Financed	X	X
HU14	Rail	Szolnok node	Work	Bridge upgrading programme of Hungarian Railways (MÁV) (I. phase)	Hungarian government	2014-2015	28.38	ITOP Cohesion Fund	X	X
HU15	Rail	Szolnok node	Work	Szolnok complex station upgrade	Hungarian government	2018-2020	131.25	CEF	X	
HU16	Rail	Szolnok - Szajol	Work	Szolnok - Szajol line upgrade	Hungarian government	2013-2015	9.35	ITOP/IKOP Cohesion Fund	X	X
HU17	Rail	Gyoma–Lőkösháza	Work	Gyoma–Lőkösháza ETCS level 2 implementation	NIF	2013-2016	Costs included in Budapest - Gyoma project ETCS project	Financed	X	X
HU18	Rail	Gyoma - Békéscsaba	Work	Gyoma - Békéscsaba interlocking upgrade and ETCS2 implementation on Békéscsaba station, Ferencváros - Lőkösháza line (III/I.b. phase)	Hungarian government	2013-2016	51.27	ITOP/IKOP Cohesion Fund	X	X

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
HU19	Rail	Békéscsaba - Lőkösháza	Work	Békéscsaba - Lőkösháza 2nd line building	Hungarian government	2017-2019	160.92	CEF	X	X
HU20	Rail	Entire Hungarian corridor network	Study	Projects with tight implementation schedule	Hungarian government	2013-2015	5.00	ITOP/IKOP; Cohesion Fund		X
RO1	Rail	Border Curtici - Arad - km 614 (HU, RO)	Work	''Modernizing and rehabilitation of TEN-T corridor network on RO territory, section Boarder rail Curtici-Arad - km 614'': Main objectives: - Decrease of travel/transport times between Western Europe and Southern Europe, - Increase of rail capacity between HU and RO - Enhancement of service quality of regional and local rail services. Measures included: - New construction of the second track at border crossing for 5.56 km - Rehabilitation for existing line on 41.18 km for maximum speed of 160 km/h; - Signalling improvement; - ERTMS/ETCS Level 2	SN CFR SA	2012-2016	352.58	235.36 / Cohesion Fund	X	X

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RO2	Rail	- km 614 - Gurasada - Gurasada - Simeria	Work	''Modernizing and rehabilitation of TEN-T corridor network on RO territory, sections km 614 - Gurasada and Gurasada - Simeria'': Main objectives: - Decrease of travel/transport times between Western Europe and Southern Europe, - Enhancement of service quality of regional and local rail services. Measures included: - Rehabilitation for existing double-tracks electrified railway on 60.66 km for maximum speed of 160 km/h; - Bridges and tunnels (of 624 m and 250 m); - Electrification works; - ERTMS (ETCS level2 and GSM-R)	SN CFR SA	2014-2020	1,970.00	OP 2014-2020	X	X
RO3	Rail	Simeria - Coslariu (Lot 2 Coslariu – Vintu de Jos)	Work	''Modernizing and rehabilitation of TEN-T corridor network on RO territory, section Coslariu - Simeria'': Main objectives: - Decrease of travel/transport times between Western Europe and Southern Europe, - Enhancement of service quality of regional and local rail services. Measures included: - Rehabilitation for existing double-tracks electrified railway on 74.73 km for maximum speed of 160 km/h; - Signalling improvement; - ERTMS/ETCS level 2	SN CFR SA	2011-2016	779.87	520.40 /Cohesion Fund	X	X

ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
RO4	Rail	Coslariu - Sighisoara - Lot 1: Sighișoara -Ațel - Lot 2: Ațel – Micasasa - Lot 3: Micasasa – Coslariu	Work	''Modernizing and rehabilitation of TEN-T corridor network on RO territory, section Sighisoara - Coslariu'': Main objectives: - Decrease of travel/transport times between Western Europe and Southern Europe, - Enhancement of service quality of regional and local rail services. Measures included: - Rehabilitation for existing double-tracks railway on 63.46 km for maximum speed of 160 km/h; - New construction of the second track for 26.04 km; - ERTMS implementation (ETCS level 2 +GSM-R); - Electrification of 89.50 km	SN CFR SA	2012-open	1,124.67	751.30 / Cohesion Fund	X	X
RO5	Rail	Sighisoara - Brasov	Work	''Modernizing and rehabilitation of TEN-T corridor network on RO territory, section Brasov - Sighisoara'': Main objectives: - Decrease of travel/transport times between Western Europe and Southern Europe, - Enhancement of service quality of regional and local rail services. Measures included: - Rehabilitation for existing double-tracks electrified railway for maximum speed of 160 km/h; - Signalling improvements; - ERTMS	SN CFR SA	2016-2021	1,740.00	OP 2014-2020	X	X

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
RO6	Rail	Brasov - Predeal	Work	''Modernizing and rehabilitation of TEN-T corridor network on RO territory, section Predeal-Brasov'': Main objectives: - Decrease of travel/transport times between Western Europe and Southern Europe, - Enhancement of service quality of regional and local rail services. Measures included: - Rehabilitation and new construction for maximum speed of 160 km/h - Signalling improvements - ERTMS	SN CFR SA	2016-2020	200.00	OP 2014-2020	X	X
RO7	Rail	Brazi - Buftea	Study	''Pilot Project for ERTMS level 2 - Study'': Main objectives: - Improving railway network interoperability for a single European rail network, - Enhancement of service quality and safety of regional and local rail services. Measures included: - Implementation of ERTMS/ECTS level 2 + GSM-R on 37 km, between Buftea and Brazi, part of Bucuresti to Brasov railway section, - Pilot testing and implementation rules for further ERTMS implementation on the entire TEN-T core network	SN CFR SA	2010-2017	61.16	41.93/ Cohesion Fund	X	X

ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
RO8	Rail	Brazi - Buftea	Work	''Pilot Project for ERTMS level 2 - Implementation'': Measures included: - Installation and testing of ERTMS/ETCS Level 2 (track-side transmitters and on-board equipment in a minimum of six passenger service locomotives from CFR Calatori) - Set-up of GSM radio network, including fibre optic transmission equipment, interfaces to other systems and two Mobile Services Switching Centres (MSCs)	Romanian MoT	open	51.18	44.51 /Cohesion Fund		X
RO9	Rail	Bucuresti-Constanta	Work	''Rehabilitation of Rail bridges crossing Danube River at km 152+149 and km 165+817 on Bucuresti Constanta railway'': Main objectives: - Improving railway safety on corridor - Enhancement of service quality of regional and local rail services. Measures included: - rehabilitation of 2.55 km of bridge length (968 m -Borcea +1596 m –Dunărea)	SN CFR SA	2013-2015	49.39	33.56 / Cohesion Fund	X	X
EU4	Rail	Craiova-Timisoara-Curtici-Lokoshaza-Budapest-Gyor-Hegyeshalom (RO, GR, BG, HU)	Study	''Studies for the development of the Railway Priority Project 22': Measures included: Phase A: Assessment study for the entire length of section to establish common standards. Phase B: Detailed technical studies in all four participating Member States.	OSE ERGOSE BDZ Infra CFR MAV	2008-2015	13.00	**Financed** 6.5 / National budgets 6.5 /TEN-T Multi-Annual Programme	X	X

ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
RO10	Rail	Arad -Timisoara - Caransebes	Work	''Modernizing and rehabilitation of TEN-T corridor network on RO territory, south branch (and CNC-OEM) section Caransebes-Timisoara-Arad '': Main objectives: - Decrease of travel/transport times between Western Europe and Southern Europe, - Enhancement of service quality of regional and local rail services. Measures included: - Rehabilitation and new construction for track doubling - where necessary - for maximum speed of 160 km/h - Signalling improvements; - ERTMS	SN CFR SA	unknown - 2020	670.00	TEN-T, FS		X
RO11	Rail	Caransebes-Drobeta Turnu Severin - Craiova	Work	''Modernizing and rehabilitation of TEN-T corridor network on RO territory, South branch (and CNC-OEM) section Caransebes-Drobeta Turnu Severin - Craiova '': Main objectives: - Decrease of travel/transport times between Western Europe and Southern Europe, - Enhancement of service quality of regional and local rail services. Measures included: - Rehabilitation and new construction for track doubling - where necessary- for maximum speed of 160 km/h - Signalling improvements - ERTMS	SN CFR SA	unknown - 2020	1,620.00	TEN-T, FS	X	X

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
CZ1	Rail	DE/CZ border - Cheb	Work	''Optimization of the line Cheb (outside) - state border of SRN /Germany/, 1st part'':	Railway Infrastructure Administration, state organization (RIA)	2014-2015	20.00	**Financed** 6 /National budget 14 /OPT I	X	X
CZ2	Rail	Cheb - Plzeň	Work	''ETCS on railway line Plzeň – Cheb '': ETCS level 2 implementation	Railway Infrastructure Administration, state organization (RIA)	2015-2018	15.00	**Financed** 4.5 / National budget 10.5 /CEF	X	X
CZ3	Rail	DE/CZ border - Česká Kubice - Domažlice - Plzeň	Work	''GSM-R on railway line Plzeň – Domažlice – Česká Kubice st.border '': GSM-R implementation	Railway Infrastructure Administration, state organization (RIA)	2019-2021	7.00	**Financed** 2 /National budget 5 /CEF	X	X
CZ4	Rail	Česká Kubice - Plzeň, section Česká Kubice -Stod	Work	Modernization of the line Plzeň - Česká Kubice, section Stod (excl.) - Česká Kubice	Railway Infrastructure Administration, state organization (RIA)	2019-2022	219.00	**Financed** 66 /National budget 153 /CEF/OPT II		X
CZ5	Rail	Česká Kubice - Plzeň, section Stod - Plzeň	Work	Modernization of the line Plzeň - Česká Kubice, section Plzeň (excl.)-Stod (excl.)	Railway Infrastructure Administration, state organization (RIA)	2019-2022	255.00	**Financed** 76 /National budget 179 /CEF/OPT II		X

ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
CZ6	Rail	Česká Kubice - Plzeň, section Stod - Plzeň	Work	Modernization of the line Plzeň - Česká Kubice, section Plzeň (excl.)-Stod (incl.)	Railway Infrastructure Administration, state organization (RIA)	2019-2022	219.00	**Financed** 66 /National budget 153 /CEF/OPT II		X
CZ7	Rail	Plzeň	Work	Plzeň passage through the junction in the direction of III. TŽK	Railway Infrastructure Administration, state organization (RIA)	2011-2014	45.00	**Financed** 21 /National budget 24 /OPT I		X
CZ8	Rail	Plzeň	Work	Junction Plzeň, 1st construction - reconstruction of the Praha deviated tracks'	Railway Infrastructure Administration, state organization (RIA)	2014-2016	75.00	**Financed** 27/National budget 37,5 /OPT I 10,5 /OPT II		X
CZ9	Rail	Plzeň	Work	''Junction Plzeň, 2nd construction - reconstruction of passenger station, including bridges Mikulášská'': Measures included: - Reconstruction of Plzeň passenger station - Reconstruction of bridges	Railway Infrastructure Administration, state organization (RIA)	2015-2016	51.00	**Financed** 15 /National budget 36 /CEF		X
CZ10	Rail	Plzeň	Work	''Junction Plzeň, 3rd construction - transposition of the Domažlice line'': Main objectives: - Upgrade of basic parameters: GC loading gauge UIC, load class D4; - Increase line speed to max. 120 km/h Measures included: - Comprehensive modernization or reconstruction of tracks	Railway Infrastructure Administration, state organization (RIA)	2016-2018	61.00	**Financed** 18 /National budget 43 /CEF		X

ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
CZ11	Rail	Plzeň - Beroun	Work	''ETCS on railway line Beroun – Plzeň'': ECTS level 2 implementation	Railway Infrastructure Administration, state organization (RIA)	2016-2018	10.00	**Financed** 3 /National budget 7 /CEF		X
CZ12	Rail	Plzeň - Rokycany	Work	''Modernization of the line Rokycany - Plzeň'': Main objectives: - Comprehensive modernization of the railway section between Rokycany and Pilsen; - Significant shortening of travel time by shortening the stretch of 6.1 km and an increase of line speed to 120-200 km/h. Measures included: - Routing adjustments - Alignment optimisation - Relocation and upgrade of stations - New tunnels - Anti-noise measures	Railway Infrastructure Administration, state organization (RIA)	2013-2016	185.00	**Financed** 64 /National budget 60 /OPT I 61mn /OPT II		X
CZ13	Rail	Rokycany - Zbiroh	Work	''Optimisation of the Zbiroh - Rokycany'': Main objectives: - Upgrade of basic parameters (UIC GC and class loading D4); - Achieve a maximum speed of 120 km/h for conventional trains and 160 km/h for tilting trains; Measures included: - Reconstruction of station Kařízek, Skeeter and Rokycany; - Abandoning of station Zbiroh, replacement by new station Kařez; - Adjustment of alignment; - Modernization of telecommunication equipment and station safety devices;	Railway Infrastructure Administration, state organization (RIA)	2009-2014	163.00	**Financed** 60.5 / National budget 102.5 /OPT I		X

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
CZ14	Rail	Králùv Dvùr - Beroun	Work	Optimization of the line Beroun (incl.) - Králùv Dvùr	Railway Infrastructure Administration, state organization (RIA)	2015-2017	61.00	**Financed** 18 /National budget 43 /CEF		X
CZ15	Rail	Beroun - Černošice	Work	Optimization of the line Černošice (incl.) - Beroun (outside)	Railway Infrastructure Administration, state organization (RIA)	2017-2019	161.00	**Financed** 48 /National budget 113 /CEF		X
CZ16	Rail	Beroun - Praha	Work	GSM-R junction Praha (Beroun - Praha – Benešov)	Railway Infrastructure Administration, state organization (RIA)	2014-2015	14.00	**Financed** 5 /National budget 9 /OPT I		X
CZ17	Rail	Černošice - Praha Smíchov	Work	Optimization of the line Praha - Smíchov (outside) - Černošice (outside)'	Railway Infrastructure Administration, state organization (RIA)	2016-2018	84.00	**Financed** 25 /National budget 59 /CEF		X
CZ18	Rail	Praha-Vršovice seř.n. - Praha-Radotín	Work	Modernization of the section Praha-Radotín - Praha-Vršovice seř.n.	Railway Infrastructure Administration, state organization (RIA)	> 2019 - open	TBD	TBD		X
CZ19	Rail	Praha hl.n. - Praha Hostivar, part of Praha junction	Work	''Optimization of the line Praha Hostivar - Praha h.l., 1st part'': Main objectives: - Increase the capacity of the runway, in particular with regard to the trains at the container terminal in Praha Uhříněvsi;	Railway Infrastructure Administration, state organization (RIA)	2014-2016	45.00	**Financed** 17/National budget 28 /OPT I	X	X

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
				- Removal of interdependence train location opposite directions in Praha-Hostivař; - Removal of collision time slots regional and long-distance trains; - Achievement of track load class D4 and spatial continuity UIC GC; - Increase line speed and shorten transit time, - Increase passenger safety; - Improved quality and shorter transfer relations; - Replacement of equipment and buildings operationally unreliable and outdated. Measures included: - Total track reconstruction of railway station Praha-Hostivař; - Modification of tracks regarding sufficient payload length (min. 650 m) to stop freight trains; - Praha-Hostivař: Modification of the track to Praha-Malešice incl. territorial reserve for the 2nd track; - Platform construction with safe access for passengers						
CZ20	Rail	Praha hl.n. - Praha Hostivar, part of Praha junction	Work	''Optimization of the line Praha Hostivar - Praha h.l., 2nd part'': Main objectives: - Upgrade of rails, - Remove bottlenecks that create speed drops, - Increase of line capacity, - Part of Praha junction, connection of RRT core network Praha-Uhrineves Measures included: - Upgrade of rails	Railway Infrastructure Administration, state organization (RIA)	2015-2018	164.00	**Financed** 49 /National budget 115 /CEF	X	X
CZ21	Rail	Praha-Hostivař / Praha-Vršovice - Praha-Malešice - Praha-Libeň	Work	''Increasing capacity of the line Praha-Libeň – Praha-Malešice – Praha-Hostivař / Praha-Vršovice'': Modernization of the track section Praha-Libeň - Praha-Malešice, I. part	Railway Infrastructure Administration, state organization (RIA)	2017-2019	52.00	**Financed** 16 /National budget 36 /CEF		X

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
CZ22	Rail	Praha Běchovice - Úvaly	Work	''Modernization of the track section Praha Běchovice - Úvaly'': Measures includes: - Reconstruction of tracks, including drainage; - Remediation and increase of carrying capacity of the substructure; - Reconstruction of bridges, underpasses, culverts, retaining walls; - Construction of a new underpass at Praha Klánovice; - New signal bridges, new platforms at railway station Úvaly; - Praha Klánovice: shelter and access to the platform; - Laying of energy, communication, security and fiber optic cables along the route; - Construction of track-side signaling equipment; - Reconstruction of the existing traction substations Bechovice.	Railway Infrastructure Administration, state organization (RIA)	2013-2016	65.00	**Financed** 18.5 /National budget 40 /OPT I 6.5 /OPT II		X
CZ23	Rail	Nymburk hl. n.	Work	Modernization of railway st. Nymburk hl. n.	Railway Infrastructure Administration, state organization (RIA)	> 2019 - open	TBD	OPT II	X	X
CZ24	Rail	Praha Vysocany- Lysa nad Labem	Work	''Optimization of the line Lysá nad Labem - Praha Vysočany, 2nd construction'': Main objectives: - Optimization of the line, - Part of the priority projects Measures included: - Optimization of the line; - Freight bypass; - Rail connection airport	Railway Infrastructure Administration, state organization (RIA)	2017-2021	255.00	**Financed** 76.5 / National budget 178.5 /CEF	X	X

ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
CZ25	Rail	Praha Vysocany- Lysa nad Labem	Work	''Optimization of the line Lysá nad Labem - Praha Vysočany, 2nd construction, 1th phase'': Reconstruction of the Čelákovice railway station	Railway Infrastructure Administration, state organization (RIA)	2016-2018	35.00	**Financed** 10.5 / National budget 24.5 /CEF	X	X
CZ26	Rail	Lysa nad Labem - Kolin	Work	Optimization of the line Decin - Vsetaty - Lysa nad Labem - Kolin	Railway Infrastructure Administration, state organization (RIA)	2018-2022	438.00	**Financed** 131.4 / National budget 306.6 OPT II		X
CZ27	Rail	Kolin - Choceň	Work	Úprava SZZ a TZZ pro ETCS v úseku Kolin - Choceň	Railway Infrastructure Administration, state organization (RIA)	2012-2013	10.00	**Financed** 10 /National budget		X
CZ28	Rail	Praha-Libeň – Kolín	Work	''ETCS on 1st rail transit corridor: st. border (DE) - Dolní Žleb - Praha-Libeň – Kolín'': ECTS level 2 implementation	Railway Infrastructure Administration, state organization (RIA)	2015-2017	25.00	**Financed** 7.5 / National budget 17.5 /CEF		X
CZ29	Rail	Kolin-Česká Třebová	Work	''Corridor E: Trackside equipment in the Czech Republic'': Main objectives/Measures included: Preparation of the tender documents, the award of the contracts and the trackside installation of the ERTMS/ETCS Level 2 system	Beneficiary: Ministry of Transport Implementing body: Railway Infrastructure Agency	2008-2014	41.56	**Financed** 20.78 / National budget 20.78 / TEN-T Multi-Annual Programme		X

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
CZ30	Rail	Kolin-Pardubice	Study	''Optimization of the line Pardubice - Kolin'': Main objectives: - Remove bottlenecks, - Configuration of railway stations	Railway Infrastructure Administration, state organization (RIA)	unknown -> 2020	TBD	TBD		X
CZ31	Rail	Pardubice	Work	''Passage through the railway junction Pardubice'': Main objectives: - Modernization of the junction, - Priority within TEN-T network	Railway Infrastructure Administration, state organization (RIA)	2019-2021	19.00	**Financed** 6 /National budget 13 /CEF		X
CZ32	Rail	Chocen-Usti nad Orlici	Work	''Modernization of the line Usti nad Orlici - Chocen'': Main objectives: - Modernization of the line, - Priority project within the scope of the TEN-T network	Railway Infrastructure Administration, state organization (RIA)	2018-2021	241.00	**Financed** 72 /National budget 169 /CEF		X

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
CZ33	Rail	Ústí nad Orlicí	Work	''Passage through the railway junction Ústí nad Orlicí'': Main objectives: - Achieve load class D4 and spatial continuity for track loading gauge UIC GC; - Equipped with new modern electronic security equipment; - Remove obsolete buildings and technology files; - Increase traffic safety; - Save operating costs and infrastructure maintenance costs. Measures included: - Realignment of tracks (speed increase up to 160 km/h); - Reconstruction of bridges; - Removal of two level crossings in the station; - Noise barriers and noise reduction measures; - New safety equipment - central electronic interlocking; - Deployment of ERTMS.	Railway Infrastructure Administration, state organization (RIA)	2012-2015	40.00	**Financed** 14 /National budget 26 /OPT I		X
CZ34	Rail	Ceska Trebova	Work	''Passage through the railway junction Ceska Trebova'': Main objectives: - Modernization of the junction; - Priority within TEN-T network	Railway Infrastructure Administration, state organization (RIA)	2019-2021	222.00	**Financed** 67 /National budget 155 /CEF		X
CZ35	Rail	Ceska Trebova - Prerov	Work	''ETCS on railway line Přerov – Česká Třebová'': ECTS level 2 implementation	Railway Infrastructure Administration, state organization (RIA)	2016-2018	11.00	**Financed** 3.5 /National budget 7.5 /CEF		

ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
CZ36	Rail	Olomouc	Work	''Reconstruction of the railway st. Olomouc'': Main objectives: - Introduction of the railway station Olomouc in accordance with the standards for the modernization of selected railway network in the Czech Republic and the TEN-T corridors; - Increase traffic safety; - Reduce the negative impact of rail transport on the population (noise barriers); - Increase access to transport for people with reduced mobility. Measures included: - Renovation of the railway superstructure and rehabilitation of the substructure incl. question of bridges and culverts; - Upgrade technology equipment, overhead lines, signalling and communications equipment and power equipment; - Reconstruction of tracks to enable 160 km/h, in private station 140 km/h; - Reconstruction of three bridges, the existing underpass and two culverts; - New platform with a fly-over approach and access for disabled passengers; - Set up an electronic interlocking of 3. category; - Prepare for the implementation of ERTMS / ETCS; - Construction of noise walls.	Railway Infrastructure Administration, state organization (RIA)	2013-2016	81.00	**Financed** 22 /National budget 44 /OPT I 15 /OPT II	X	

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
CZ37	Rail	Přerov	Work	''Reconstruction of the railway st. Přerov, 1st construction'': Main objectives: - Upgrade of the station infrastructure, - Increase of line speed up to 160 km/h. Measures included: - Reconstruction of the superstructure and rehabilitation of the substructure incl. new drainage, - Reconstruction of bridges, - Upgrade and relocation of platforms, - Upgrade of interlocking technology.	Railway Infrastructure Administration, state organization (RIA)	2009-2014	139.00	**Financed** 37.5 /National budget 101.5 /OPT I	X	X
CZ38	Rail	Přerov	Work	''Reconstruction of the railway st. Přerov, 2nd construction'': Main objectives: - Upgrade of the station infrastructure, - Increase of line speed up to 160 km/h. Measures included: - Reconstruction of the superstructure and rehabilitation of the substructure incl. new drainage, - Reconstruction of bridges, - Upgrade and relocation of platforms, - Upgrade of interlocking technology.	Railway Infrastructure Administration, state organization (RIA)	2017-2021	113.00	**Financed** 34 /National budget 79 /CEF	X	X
CZ39	Rail	Přerov - Ostrava	Work	''ETCS on railway line: Petrovice u Karviné – Ostrava – Přerov – Břeclav '': ECTS level 2 implementation	Railway Infrastructure Administration, state organization (RIA)	2015-2017	22.00	**Financed** 7 /National budget 15 /CEF		X
CZ40	Rail	Ostrava	Work	Passage through the railway junction Ostrava	Railway Infrastructure Administration, state organization (RIA)	2019-2021	222.00	**Financed** 67 /National budget 155 /CEF		X

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
CZ41	Rail	Ostrava	Work	''Ostrava Leos Janacek Airport, rail connection'': Main objectives: - Implement flexible public transport system conforming to the requirements of its users; - Encourage alternative transport system for road transport to ensure sustainable development; - Ensure seamless availability airports in regional and inter-regional ties; - Strengthening the position of Leoš Janáček Airport Ostrava as regional airport to ensure its further development; - Promote economic development around the airport (industrial zone, logistics zone and business zone); - Reduce traffic congestion, pollution and energy consumption in exposed transport directions. Measures included: - Rail link from Sedlnice to the newly built railway terminal at the airport in the length of 2.9 km (1track line, electrified with 3 kV DC and equipped with safety devices 3rd category).	Moravian-Silesian Region	2011-2014	21.00	18mn /CEF	X	X

ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
CZ42	Rail	(a) Ostrava junction (b) Section Svinov Ostrava - Ostrava main station - Detmarovice - Czech Cieszyn - Trinec - Mosty u Jablunkova - st. SR border (c) Section Svinov Ostrava - Opava (d) Section Přerov - Olomouc - Zábøeh Moravia - Czech MEDIA	Work	''GSM-R in the Ostrava - st. hr. SR and Prerov - Czech Třebová'': Main objectives: Construction of the digital radio system GSM-R Measures included: - Installation of GSM-R on 230 km of track; - Installation of fibre optic cable diagnostic (DOK) and BTS stations connect to the existing railway communication cable and transmission network and power source.	Railway Infrastructure Administration, state organization (RIA)	2011-2013	20.00	**Financed** 5 /National budget 15 /OPT I	X	X
CZ43	Rail	Mosty u Jablunkova - Dětmarovice	Work	''ETCS on railway line Mosty u Jablunkova - Dětmarovice'': ECTS level 2 implementation	Railway Infrastructure Administration, state organization (RIA)	2017-2019	10.00	**Financed** 3 /National budget 7 /CEF		X
CZ44	Rail	Dětmarovice - Český Těšín	Work	Optimization of the line Český Těšín - Dětmarovice	Railway Infrastructure Administration, state organization (RIA)	2016-2018	104.00	**Financed** 31 /National budget 73 /OPT II		X

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
CZ45	Rail	Bystřice n.O. - Č. Těšín	Work	''Optimization of the line Bystřice n.O. - Č. Těšín 2nd construction'': Main objectives: - Achieve line class D4 and UIC loading gauge UIC - GC; - Increase throughput capacity; - Increase the maximum line speed at 120 km/h, respectively at 150 km/h for passenger trains with tilting. Measures included: - Upgrade existing security devices; - Reconstruction of main tracks; - Reconstruction of bridges; - Upgrade of safety equipment, communication devices and high-voltage technology including DRT.	Railway Infrastructure Administration, state organization (RIA)	2013-2016	40.00	**Financed** 11 /National budget 20 /OPT I 9 /OPT II	X	X
CZ46	Rail	Hranice na Moravě - Horní Lideč - Střelná	Work	''GSM-R on railway line Hranice na Moravě - Horní Lideč - Střelná'': Implementation of GSM-R	Railway Infrastructure Administration, state organization (RIA)	2016-2017	7.00	**Financed** 2 /National budget 5/CEF	X	X

IWW PROJECTS

ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
DE18	IWW	Lower Main: Rhein Mouth – Aschaffenburg	Works	Infrastructure upgrade, *Deepening of the fairway of the Lower Main* enable a draught of 3.10 m	WSV - GDWS - Außenstelle Süd and Wasser-straßen-Neubauamt Aschaffenburg	2015-2020	TBD	TBD		X
DE19	IWW	Main: Obernau lock	Works	Infrastructure rehabilitation, *Reconstruction of Obernau lock* construction of a new barrage replacing the old one, dismanteling of the over-aged lock	WSV - GDWS - Außenstelle Süd and Wasser-straßen-Neubauamt Aschaffenburg	2015-2020	120.00	TBD		X
DE20	IWW	Main-Danube Canal: Kriegenbrunn and Erlangen lock	Works	Infrastructure rehabilitation, *Reconstruction of Kriegenbrunn and Erlangen lock* construction of a new barrages replacing the old one, dismanteling of the over-aged lock	WSV - GDWS - Außenstelle Süd and Wasser-straßen-Neubauamt Aschaffenburg	2017-2021	210.00	TBD		X
DE21	IWW	Danube: Straubing - Vilshofen, km 2319 - km 2250	Study	Infrastructure upgrade*, Upgrade of the Danube Straubing-Vilshofen* subsection 1 (Straubing-Deggendorf), design (including the study for additional 20 cm fairway depth) and approval planning + public consultation within the frame of the planning approval procedure	Bundesministerium für Verkehr und digitale Infrastruktur	2014-2016	7.80	**Financed** (50% TEN-T)	X	X

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
DE22	IWW	Danube: Straubing - Vilshofen, km 2319 - km 2250	Works	Infrastructure upgrade, *Upgrade of the Danube between Straubing and Vilshofen: Pursuing Variant A* Adaption of 122 groynes and 10 longitudinal structures, new construction of 67 goynes and 8 longitudinal structures, dredging works amounting to 450,000 m³	WSV - GDWS - Außenstelle Süd	2016 - 2022	160.00	TBD	X	X
AT26	IWW	Danube: East of Wien, km 1921 - km 1872.70	Works	Infrastructure upgrade, *Integrated River Engineering Project East of Vienna* Granulometric improvement of the river bed, new and re-construction of groynes, river bank restoration, side arm reconnection	viadonau	2007 - 2015	87.00	**Financed** (64.63mn / State budget 22.42mn / TEN-T)	X	X
AT27	IWW	Danube: East of Vienna, km 1921 - km 1872.70	Study and works	Infrastructure upgrade, *Integrated River Engineering Project Danube East of Wien, Implementation 2016-2020* Granulometric improvement of the river bed / sediment management, new and re-construction of groynes, side arm reconnection, river bank restoration *Next steps 2021 - 2030*	viadonau	2016 - 2020+	60.00 plus	State budget CEF	X	X

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
AT28	IWW	Danube: Austrian Danube, km 2203 - km 1875	Study and works	Infrastructure rehabilitation, *Optimization of locks* Pilot advanced surveillance and monitoring systems, Pilot management tools for scheduling locking procedures, improve lock constructions and facilities	viadonau	2016-2020	6.00	CEF	X	X
AT29	IWW	Danube: Austrian Danube, km 2203 - km 1875	Study and works	RIS, *Enhancements of River Information Services* pilot new advanced services, pilot new technologies and standards, enhance and improve services	viadonau	2016-2020	10.00	CEF	X	X
EU5	IWW	Danube: Morava mouth - Bratislava, km 1880.26 - km 1862.00 (Cross border AT – SK)	Study	Infrastructure upgrade, *Technical measures* to provide required fairway parameters between r.km 1880.260 and 1862.000 of the Danube inland waterway 2015-2019: Technical Studies, Analyses, Feasibility Study, CBA, EIA, SEIA, project documentation based on Feasibility Study	Waterborne Transport Development Agency	2015 - 2019	47.06	Operational Programme Integrated Infrastructure	X	X

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
SK11	IWW	Danube: Slovakian Danube	Study and works	Rehabilitation and maintenance*, Equipment for Slovakia* Acquisition of equipment to monitor the fairway, to plan and execute maintenance works and to provide information to users Trainings to become acquainted with the use of the new equipment	Waterborne Transport Development Agency + (SVP – Slovak Water Management Enterprise)	2016-2020	8.08	TBD	X	X
EU6	IWW	Danube: Gabčíkovo – Nagymaros, km 1811 - km 1708.2 (cross border SK – HU)	Study and works	Infrastructure upgrade*, Complex solution for Danube downstream of Bratislava* Measures depend on the agreement of Slovakian and Hungarian authorities	Plenipotentiary of the Slovak Republic Government for Construct-ion and Operation of Gabčíkovo–Nagymaros System of Water Works, Hungarian implementation body not yet nominated	-	-	-	X	X
SK12	IWW	Komárom (HU) - Komárno (SK)	Study	New construction, *Feasibility study on the new bridge between Komárno and Komárom*	IVSC Bratislava (Capital construction and management of roads)	2016-2019	45.00	CEF	X	X
HU21	IWW	Komárom (HU) - Komárno (SK)	Works	New construction, *Construction of the new bridge between Komárno and Komárom* *Building permission in progress*	Hungarian Government, Ministry of National Development	2016 - 2018	93.84	CEF	X	X

ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
HU22	IWW	Danube: Hungarian Danube	Study	*Further preparation of Hungarian TEN-T IWW and port infrastructure*	Hungarian Government	~2016 - 2020	50.78	CEF	X	X
HU23	IWW	Danube: Hungarian Danube	Study and works	Rehabilitation and maintenance, *Equipment for Hungary* Acquisition of equipment to monitor the fairway, to plan and execute maintenance works and to provide information to users Trainings to become acquainted with the use of the new equipment	Water Directorates of the Ministry of Interior (VIZIGs)	2015 -	4.33	TBD	X	X
HR1	IWW	Danube: Sotin, km 1322	Study and works	Infrastructure upgrade, *Rehabilitation of the right bank of the Danube river at Sotin* detailed design, EIA, river training works (sill and two T-groynes)	Ministry of Maritime Affairs, Transport and Infrastructure of Croatia	2011 - 2016	4.80	**Financed** Cohesion Fund (CEF)	X	X
HR2	IWW	Danube: Opatovac	Works	Infrastructure new construction, *International ship winter shelter on the Danube in Croatia (Opatovac)* Construction of a winter shelter for 23 vessels, construction of bank structures, building and organization of local waters	Ministry of Maritime Affairs, Transport and Infrastructure of Croatia	2011 - 2018	4.10	**Financed** Cohesion Fund (CEF)		X

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
EU7	IWW	Danube: Critical sectors between Bezdan and Bačka Palanka, km 1433 – km 1297 (cross border HR – RS)	Study and works	Infrastructure upgrade, *River training and dredging works on critical sectors on the Danube between Bezdan and Bačka Palanka* Stakeholders forum, morphological modelling, EIA in line with ESPOO convention, Feasibility study (approval by state revision commissions), Prioritization of critical sectors for river training structures, Main designs, River training works, Supervision and environmental monitoring	Ministry of Construction, Transport and Infrastructure – Directorate for Inland Waterways-Plovput	TBD	48.50 (3.5 missing documentation, 40 works, 5 supervision and environmental monitoring)	TBD	X	X
HR3	IWW	Sava: border of the Republic of Serbia to Sisak, km 211 - km 594	Study and works	Infrastructure upgrade, *Reconstruction and Improvement of the Sava River in Croatia* Detailed design, Renewal and construction of groynes and revetments; Construction of bottom sills / excavation of river material	Ministry of Maritime Affairs, Transport and Infrastructure of Croatia	2015 - 2019	55.00	State budget Cohesion Fund (CEF)	X	X
HR4	IWW	Danube: Croatian Danube	Works	Rehabilitation and maintenance, *Specialized vessels for monitoring and inland waterways marking* Supply of three specialized vessels for monitoring and marking of the fairway	AVP - Agency for Inland Waterways	2015 -	2.70	State budget Cohesion Fund (CEF)	X	X

ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
HR5	IWW	Danube: Croatian Danube	Study and works	Rehabilitation and maintenance, *Equipment for Croatia* Acquisition of equipment to monitor the fairway, to plan and execute maintenance works and to provide information to users Trainings to become acquainted with the use of the new equipment	AVP - Agency for Inland Waterways	2015 -	0.80	TBD	X	X
HR6	IWW	Sava	Study and works	RIS, *Full implementation of River Information Services on the Sava River Waterway* Procurement and installation of RIS and Voice VHF systems	Ministry of Maritime Affairs, Transport and Infrastructure of Croatia	2012 - 2016	1.60	**Financed** (State budget, IPA, World Bank – EBRD)	X	X
EU8	IWW	Sava (cross border HR – RS - BA)	Study and works	Infrastructure upgrade, *Rehabilitation and Development of Transport and Navigation on the Sava River Waterway* Develop required studies and designs; River training works (groynes, sills, bank protection, dredging and bridge reconstruction); Apply an integrated approach	International Sava River Basin Commission (ISRBC)	2008 - 2016	85.00	State budget IPA World Bank, EBRD	X	X

ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
RS1	IWW	Sava: from Drina River Confluence to Belgrade, km 178 - km 0	Study and works	Infrastructure upgrade, *Reconstruction and Improvement of the Sava River in Serbia* Preparation of Documentation Execution of Works	Ministry of Construction, Transport and Infrastructure – Directorate for Inland Waterways - Plovput	TBD	9.30	TBD		X
EU9	IWW	Danube: Apatin - Constanta, km 1433 - km 0 (cross border HR – RS – RO – BG)	Study and works	Infrastructure rehabilitation, *Danube Ship Wreck Removal* Removal of wrecks and unexploded ordinances; Preparation, classification of vessels, contracting, implementation	EDDC – European Danube Development Cooperation	TBD	0.70	State budget Cohesion Fund Public Private Partnership		X
RS2	IWW	Danube: Critical sectors between Backa Palanka and Belgrade, km 1297 – km 1170	Works	Infrastructure upgrade, *River training and dredging works on critical sectors on the Danube between Backa Palanka and Belgrade* River training and dredging works on 6 critical sectors: Susek, Futog, Cortanovci, Arankina ada, Beska, Preliv. Supervision and environmental monitoring	Ministry of Construction, Transport and Infrastructure – Directorate for Inland Waterways - Plovput	2015-2018	14.20	IPA 2013 (85%) State budget (15%)	X	X

ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
RS3	IWW	Danube: Serbian Danube	Works	RIS, Implementation of AtoNs Deployment of remote and virtual Aids to Navigation system integrated in the existing AIS network within the implemented RIS system	Ministry of Construction, Transport and Infrastructure – Directorate for Inland Waterways - Plovput	2015-2018	2.70	IPA 2013 (85%) State budget (15%)		X
RS4	IWW	Danube: Žeželj Bridge in Novi Sad	Works	New construction, *Construction of New Žeželj Bridge in Novi Sad to* increase the fairway width of the Danube Construction of the new bridge for road and rail transport, supervision of construction works	A.D. "Železnice Srbije" – Serbian Railways	2011 - 2015	45.30	**Financed** (12.7 / Autonomous Province of Vojvodina; 6.4 / City of Novi Sad; 26.2 / IPA)		X
RS5	IWW	Danube: Djerdap 1 - km 943	Study and works	Infrastructure rehabilitation, *Rehabilitation works at HPP Djerdap I* Rehabilitation of the navigation lock and replacement of the electrical and hydraulic systems	Republic of Serbia, Ministry of Infrastructure and Energy HE Djerdap d.o.o. Kladovo	TBD	24.5	TBD	X	X

ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
RS6	IWW	Danube: Prahovo, km 845.5	Works	Infrastructure rehabilitation, *Cleaning the Danube River bottom from sunken vessels, sector Prahovo* Lifting sunken vessels from the riverbed, storing and shipping and scrapping them	Republic of Serbia, Ministry of Infrastructure and Energy	TBD	13.00	TBD		X
RS7	IWW	Danube: Serbian Danube	Study and works	Rehabilitation and maintenance, *Waterway rehabilitation and maintenance equipment Serbia* Acquisition of equipment to monitor the fairway, to plan and execute rehabilitation and maintenance works and to provide information to users Trainings to become acquainted with the use of the new equipment	Ministry of Construction, Transport and Infrastructure – Directorate for Inland Waterways - Plovput	2015 -	5.38	TBD	X	X
RS8	IWW	Danube: Serbian Danube	Study and Works	New construction *Establishment of Winter port facilities in Serbia* Preparation of documentation Implementation of works	Ministry of Construction, Transport and Infrastructure – Directorate for Inland Waterways - Plovput	TBD	TBD	TBD		X

ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
EU11	IWW	Danube: Timok confluence – Calarasi, km 845.5 - km 375 (RO – BG)	Study and works	Infrastructure upgrade, *River Engineering Works to improve navigation conditions on the Romanian-Bulgarian common section (rkm 845.5–375)* Feasibility study (Romanian side), execution of river engineering works, bank protection, construction of groynes and bottom sills, closing of some secondary branches to average water levels, rehabilitation dredging	River Administration of the Lower Danube (AFDJ), Galati, Romania EADMR - Executive Agency for the exploration and maintenance of the Danube river	2015 - 2020	184.00 (85 for construction works on BG side)	29.2 (State budget) 154.8 (Cohesion Fund)	X	X
BG1	IWW, InlanD PORT	Danube: Bulgarian Danube, km 845 - km 375	Study and works	Infrastructure upgrade, *Providing round the year smooth and safe navigation on the River Danube and* dredging of Port Vidin in order to provide maximum depth of 2.5 m. Anti-erosion and anti-morphological measures Feasibility study for the construction of hydraulic nodes at critical locations	Bulgarian Ports Infrastructure Company	2015-2018	10.23	TEN-T	X	X
BG2	IWW	Danube: Bulgarian Danube, km 610 - km 375	Study and works	Rehabilitation and maintenance, *Improvement of the systems for navigation and topo-hydrographic measurements on the Danube River* Establishment of GPS geodeteoc control network Modernization of floating and coastal signalling Acquisition of surveying vessels and automatic gauging stations	EADMR - Executive Agency for the exploration and maintenance of the Danube river	2012 - 2015	6.00	**Financed** 0.9 (State Budget) 5.1 (ERDF)	X	X

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
BG3	IWW	Danube: Bulgarian Danube	Study	Rehabilitation and maintenance, TA optimization Rehabilitation Activities Technical assistance for preparation of project Modernisation and optimisation of the rehabilitation activities in the common BG-RO section of the Danube River	EADMR - Executive Agency for the exploration and maintenance of the Danube river	2014 - 2015	TBD	**Financed** (EUDRS PA10)	X	X
BG4	IWW	Danube: Bulgarian Danube	Study and works	Rehabilitation and maintenance, *Modernisation and optimisation of the rehabilitation activities in the common BG-RO section of the Danube River* Delivery of dredging equipment, including a service vessel Three barges, including servicing pontoon Small specialized vessel for hydrological surveys and monitoring in the withdrawal of alluvial deposits from the river Delivery of two vessels for marking activities Specialized vessel – Oil Spill Response Vessel	EADMR - Executive Agency for the exploration and maintenance of the Danube river	2015 - 2017	25.00	3.75 (State Budget) 21.25 (ERDF)	X	X
BG5	IWW	BG, Danube: Bulgarian Danube, km 845 - km 375	Study and works	RIS, *Implementation of River Information System on the Bulgarian part of the Danube river (BULRIS)* Acquisition and installation of RIS equipment Implementation and exploitation of RIS	Bulgarian Ports Infrastructure Company	2007 - 2015	18.00	2.7 (State Budget) 15.3 (ERDF)	X	X
BG6	IWW	Danube: Bulgarian	Study and	RIS, *Upgrade and improvement of the*	Bulgarian Ports Infrastructure	2015-2018	4.00	CEF	X	X

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
		Danube, km 845 - km 375	works	*Bulgarian River Information System (RIS)* Implement the concept of "river single window" and upgrade RIS, Establish a local VHF network, Implement WLM and ERI systems	Company					
RO12	IWW	Danube: Calarasi-Braila, km 375 - km 175	Study and works	Infrastructure upgrade, *Improving Danube Navigation Conditions between Calarasi and Braila*	River Administration of the Lower Danube (AFDJ), Galati, Romania	2016 -	TBD	TBD	X	X
RO13	IWW	Danube – București Canal	Works	Infrastructure new construction, *Danube– București Canal - Systematization of Argeș and Dâmbovița Rivers for navigation and other uses* Construction works	Administration of Navigable Canals (ACN)	2020+	1,381.00	State budget Cohesion Fund (CEF) Public Private Partnership	X	X
RO14	IWW	Danube: Sulina Canal	Study and works	Infrastructure upgrade, *Banks protection on the Sulina Canal* protect 50 km of banks, feasibility study, construction works	River Administration of the Lower Danube (AFDJ), Galati, Romania	2012 - 2020	162.00	**Financed** 33.72 (State budget) 116 (Cohesion Fund) 12.32 (EIB)	X	X

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
RO15	IWW	Black Sea Canal and Poarta Alba – Midia Navodari Canal	Works	Infrastructure rehabilitation, *Rehabilitation of locks on the Danube-Black Sea Canal and the Poarta Alba-Midia Navodari Canal* Rehabilitation of Cernavoda and Agigea locks Rehabilitation and upgrading of the basic auxiliary equipment Rehabilitation of Ovidiu lock including the high water galleries Rehabilitation of the high water galleries of the Navodari lock	Administration of Navigable Canals (ACN), Constanta, Romania	2013 - 2017	228.61	**Financed** 72.23 (State Budget) 156.38 (Cohesion fund)	X	X
RO16	IWW	Black Sea Canal	Works	Infrastructure upgrade, *Banks consolidation on the Danube–Black Sea Canal* Execution of bank consolidation works	Administration of Navigable Canals (ACN), Constanţa, Romania	2015 - 2020	185	27.75 / State budget 157.25 / Cohesion Fund	X	X
RO17	IWW	Poarta Alba–Midia Navodari Canal	Works	Infrastructure upgrade, *Banks consolidation on the Poarta Alba–Midia Navodari Canal* - execution of bank consolidation works	Administration of Navigable Canals (ACN), Constanta, Romania	2014 - 2020	309.22	**Financed** State Budget, Cohesion Fund	X	X
RO18	IWW	Danube: Romanian Danube	Study & works	Rehabilitation and maintenance, *Equipment for Romania* Acquisition of equipment to monitor the fairway, to plan and execute maintenance works and to provide information to users Trainings to become acquainted with the use of the new equipment	Administration of the Lower Danube (AFDJ), Administrat-ion of the Navigable Canals (ACN)	TBD	40.66	TBD	X	X

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RO19	IWW	Danube: Porţile de Fier I (km 943) and : Porţile de Fier II (km 863)	Works	Rehabilitation, Porţile de Fier I and II Porţile de Fier I: safety upstream head gate; upstream head, left side cut-off plate valve; intermediary head, left side segment valve Porţile de Fier II: rehabilitation / refurbishment of the main and back-up lock's equipment	Hidroelectrica S.A. (at the moment administered by the Judical Administrator EURO INSOL SPRL)	TBD	39.25	TBD	X	X
UA1	IWW	Danube in Ukraine	Study & works	RIS, *Creation of River Information Services on the Ukrainian part of the Danube River* Implementation of RIS on the Ukrainian sector of the Danube	Ministry of infrastructure of Ukraine	-	4.10	1.03/ State Budget		
EU12	IWW	AT/ BE/ DE/ NL/ LU	Study	*RIS enabled IWT corridor management* Develop the definition and implementation of a RIS corridor approach	Dutch Ministry of Transport and the Environment	2013 - 2015	2.80	**Financed** 1.41 (State Budget) 1.41 (TEN-T)	X	X
EU13	IWW	AT, SK, TBD	Study & works	*Deployment of the results of the TEN-T Study "RIS enabled IWT corridor management"* Implementation of the study results	AT, SK, TBD	2016 - TBD	TBD	TBD/ CEF	X	X

PORT PROJECTS

ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
AT30/ AT44	Inland port	Port of Vienna	Studies	Studies for the expansion of the trimodal port of Freudenau/Vienna 2012-AT-91099-S	Port of Vienna	2012-2015	5.44	TEN-T		
AT31/ AT45	Inland port	Port of Vienna	Works	Expansion of the tri-modal inland port of Vienna by land recovery 2012-AT-18070-P	Port of Vienna	2012-2015	12.79	TEN-T		
AT32	Inland port	Port of Vienna	Studies	IMPALA Intermodal hubs as urban logistics centres	Port of Vienna	2014-2015	0.20	State (BMVIT)		
AT33	Inland port	Port of Vienna	Works	Freudenau equipment modernization Development of infrastructure and modernization of cargo handling equipment	Port of Vienna	2014 – TBD	TBD	Port of Vienna + TBD		
AT34	Inland port	Port of Vienna	Works	Planning and construction of the expansion of the trimodal Port of Freudenau/Vienna	Port of Vienna	2015-2025	57.00	Port of Vienna + TBD		
AT35	Inland port	Port of Enns	Works	Container terminal enlargement	Kaindl/DB, Port of Enns	2014-2016	20.00	TBD		
AT36	Inland port	Port of Enns	Works	Cargo City Enns	Kaindl/DB, Port of Enns	2015-2030	100.00	TBD		
AT37	Inland port	Port of Enns	Studies & works	Rail connection improvement (bottleneck solution)	Port of Enns	2014-2016	TBD	TBD	X	
AT38	Inland port	Port of Enns	Studies & works	Quay rehabilitation	Port of Enns	2015-2030	TBD	TBD		
AT39	Inland port	Port of Enns	Studies & works	Further development of hinterland connection to economic area	Port of Enns	2015-2030	TBD	TBD		

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
EU14	Inland port	Various Danube ports	Studies	GETUP Green Danube Ports - recycling of outdated, obsolete suprastructure & mobile equipment, treatment of polluted port sediments in connection with proper waste management practices, reduction of hazardous emissions as well as environmental protection and restoration.	Maritime Danube Ports Administration, Galati, Romania	TBD	1.98	ERDF + IPA + ENPI		
RO20	Seaport	Port of Constanţa	Works	Road bridge over the link canal (Flyover) (Constanţa South Bridge)	NC "Maritime Ports Administration" SA	2014-2017	36.20	State + ERDF		X
RO21	Seaport	Port of Constanţa	Works	Road bridge at km 0+540 of the Danube–Black Sea Canal and the works related to the road and access infrastructure for the Port of Constanţa	NC "Maritime Ports Administration" SA	2010-2014	46.54	State + ERDF		X
RO22	Seaport	Port of Constanţa	Works	Development of the railways capacity in the river-maritime area of the Port of Constanţa	NC "Maritime Ports Administration" SA	2012-2014	18.68	State + ERDF	X	X
RO23	Seaport	Port of Constanţa	Works	The Southward Extension of the Scow Berth in the Port of Constanţa	NC "Maritime Ports Administration" SA	2012-2014	4.60	State + ERDF		X
RO24	Seaport	Port of Constanţa	Study	Masterplan of the Port Constanţa	NC "Maritime Ports Administration" SA	2014-2015	1.20	State + ERDF		X
RO25	Seaport	Port of Constanţa	Works	Modernisation of port infrastructure, by providing deeper approach channels and basins and by increasing the navigation safety	NC "Maritime Ports Administration" SA	2014-2016	36.00	State + ERDF		X

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RO26	Seaport	Port of Constanţa	Works	Pier IIIS– Pier IVS- Completion of infrastructure works and berths construction in order to develop specialized terminals	NC "Maritime Ports Administration" SA	2014-2017	378.00	State + ERDF (with possible PPP + World Bank)		X
RO27	Seaport	Port of Constanţa	Works	Completion of Barge Terminal	NC "Maritime Ports Administration" SA	2014-2016	38.00	State + CEF		X
RO28	Seaport	Port of Constanţa	Works	Quay at the entrance of Danube-Black Sea Channel in the Port of Constanţa	NC "Maritime Ports Administration" SA	2014-2016	16.50	State + CEF	X	X
RO29	Seaport	Port of Constanţa	Works	LNG Terminal in the Port of Constanţa	NC "Maritime Ports Administration" SA	2015-2017	180.00	State + CEF	X	X
RO30	Seaport	Port of Constanţa	Works	Expansion to 4 lanes of the road between Gate 7 and the junction of "Road Bridge at km 0 +540 of the Danube-Black Sea" connecting Gate 9 and Gate 8 with the Northern part of Constanţa Port	NC "Maritime Ports Administration" SA	2014-2015	18.50	State + ERDF		X
RO31	Seaport	Port of Constanţa	Works	Extension to four lanes of the road between Gate No. 10 and Gate no. 10bis and systematization of area behind Gate no. 10 of Constanţa Port	NC "Maritime Ports Administration" SA	2014-2015	4.10	State + ERDF		X
RO32	Seaport	Port of Constanţa	Works	Consolidation, stabilization and improvement Constanta Port adjacent areas administrated by NC MPA SA Constanţa	NC "Maritime Ports Administration" SA	2015-2016	16.00	State + ERDF		X
RO33	Seaport	Port of Constanţa	Works	Improvement of railways system at Gate no. 10	NC "Maritime Ports Administration" SA	2015-2016	1.40	Company's own resources	X	X

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
RO34	Seaport	Port of Constanţa	Works	Construction of the Southern Breakwater of Tomis touristic Port	NC "Maritime Ports Administration" SA	2015-2016	4.70	State + Company's own resources		X
RO35	Seaport	Port of Constanţa	Works	Modernization of water and sewage system in the Port of Constanţa	NC "Maritime Ports Administration" SA	2015-2016	26.00	State + ERDF		X
RO36	Seaport	Port of Constanţa	Works	Modernization of energetic system in the Port of Constanţa	NC "Maritime Ports Administration" SA	2015-2016	24.00	State + ERDF		X
RO37	Seaport	Port of Constanţa	Works	IT projects (Port Community System, GIS, EDIFACT, ERP & BI, etc.)	NC "Maritime Ports Administration" SA	2015-2016	7.00	State + ERDF		X
RO38	Seaport	Port of Constanţa	Works	Purchase of technical vessels (4 depollution vessels, 2 waste collection vessels and 1 fire-fighting vessel)	NC "Maritime Ports Administration" SA	2015-2016	44.00	State + ERDF		X
RO39	Seaport	Port of Constanţa	Works	Development of artificial Island in the Port of Constanţa	NC "Maritime Ports Administration" SA	2015-2017	250.00	State + ERDF (or potential PPP)		X
RO40	Seaport	Port of Constanţa	Works	Completion of the North breakwater in the Port of Constanţa	NC "Maritime Ports Administration" SA	2011-2015	147.10	State + ERDF		X
RO41	Seaport	Port of Constanţa	Works	Development of the railway capacity in Constanta South Port - Agigea	NC "Maritime Ports Administration" SA	2015-2016	5.00	State + EU Funds		X
RO42	Seaport	Port of Constanţa	Works	Photovoltaic park	NC "Maritime Ports Administration" SA	2015- 2016	40.00	State + EU Funds		X
RO43	Seaport	Port of Constanţa	Works	Wind power park	NC "Maritime Ports Administration" SA	2018 - 2020	60.00	State + EU Funds		X

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
RO44	Inland port	Port of Drobeta Turnu Severin	Works	Modernization of port infrastructure in the Port of Drobeta Turnu Severin	NC "Danube River Ports Administration" SA	2016-2017	20.00	State + ERDF		
RO45	Inland port	Port of Giurgiu	Study	High-Performance Green Port Giurgiu 2012-EU-18089-S	ILR Logistica Romania S.R.L.	2013-2015	0.80	State + TEN-T		X
RO46	Inland port	Port of Giurgiu	Works	Modernization of port infrastructure in the Port of Giurgiu	NC "Danube River Ports Administration" SA	2015-2016	5.00	State + ERDF		X
RO47	Inland port	Port of Giurgiu	Works	Giurgiu port - Development of a multimodal platform and hinterland connections	NC "Danube River Ports Administration" SA	2016-2020	103.35	State + CEF	X	X
RO48	Inland port	Port of Cernavodă	Works	Modernization of port infrastructure in the Port of Cernavodă	NC "Danube River Ports Administration" SA	2016-2018	8.20	State + ERDF		
RO49	Inland port	Port of Galati	Works	Galati multimodal platform Removing major bottlenecks by substantially upgrading existing infrastructure and bridging missing links for the Rhine Danube/Alpine core network corridor	NC "Maritime Danube Ports" SA	2015-2018	134.00	State + CEF	X	X
RO50	Inland port	Port of Galati	Works	GRAIN TERMINAL IN PORT OF GALATI - PIER 32	NC "Maritime Danube Ports" SA	2012-2016	3.56	State + TBD		
RO51	Inland port	Port of Galati	Works	GRAIN TERMINAL IN PORT OF GALATI - PIER 31	NC "Maritime Danube Ports" SA	2012-2015	6.87	State + TBD		
DE23	Inland port	Port of Nürnberg	Works	Development of the existing container terminal	Bayernhafen Gruppe	2017-2020	35.00	State + port authority		
DE24	Inland port	Port of Regensburg	Works	Container terminal enlargement	Bayernhafen Gruppe	2015-2016	14.00	State + port authority		

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
DE25	Inland port	Port of Regensburg	Works	Roll-on / Roll-off facility enlargement	Bayernhafen Gruppe	2012-2018	2.90	Port authority 100%		
DE26	Inland port	Port of Regensburg	Works	Quay wall restoration	Bayernhafen Gruppe	2014-2016	2.90	Port authority 100%		
DE27	Inland port	Port of Regensburg	Works	Enlargement of harbor area („Äußere Wiener Straße")	Bayernhafen Gruppe	2017-2018	0.80	Port authority 100%		
DE28	Inland port	Port of Regensburg	Works	Road and railway underpass alignment ("Auweg / Strecke Regensburg – Hof")	Bayernhafen Gruppe, DB-Netz, City of Regensburg	2018-2020	10.00	100% port authority, DB-Netz, Stadt Regensburg		
HR7	Inland port	Port of Slavonski Brod	Studies and works	Dangerous Cargo Terminal in the Port Slavonski Brod Waste reception and bunkering (WRB) facility construction	Port Authority of Slavonski Brod	2016-2020	8.00	TBD		X
HR8	Inland port	Port of Vukovar	Study	Technical Assistance for reconstruction of the Port of Vukovar-New port East	Port Authority of Vukovar	2013-2015	1.60	State + ERDF		
HR9	Inland port	Port of Vukovar	Works	Reconstruction of the Port of Vukovar - New port East	Port Authority of Vukovar	2015-2017	24.19	State + ERDF		
HR10	Inland port	Port of Slavonski Brod	Studies and works	Ro-La terminal and container terminal design and construction	Port Authority of Slavonski Brod	TBD	TBD	TBD		X
SK13	Inland port	Port of Bratislava	Studies and works	Modernization of infrastructure in cargo port BA and completion of connecting elements in cargo port and passenger port BA	Verejné prístavy, a.s. (Public ports, jsc)	2015-2019	64.67	State + Cohesion funds		

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
SK14	Inland port	Port of Bratislava	Studies and works	Modernization and completion of the port quays and paved areas in Palenisko basin	Verejné prístavy, a.s.	2015-2020	41.44	State + Cohesion funds		
SK15	Inland port	Port of Bratislava	Studies and works	Passenger port - waterfront Eurovea	Verejné prístavy, a.s.	2014-2017	7.00	TBD		
SK16	Inland port	Port of Bratislava	Studies and works	Landing positions for the purposes of passenger shipping - Winter port	Verejné prístavy, a.s. (Public ports, jsc)	2015-2020	60.00	TBD		
SK17	Inland port	Port of Komárno	Studies and works	Modernization of the port Komárno: upgrade of agri products terminal, construction container terminal and gas station	Verejné prístavy, a.s. (Public ports, jsc)	2017-2022	75.00	TBD		
SK18	Inland port	Port of Bratislva and Port of Komárno	Studies and works	Safety radar navigation of shipping in public ports of SR	Verejné prístavy, a.s. (Public ports, jsc)	2014-2018	2.40	TBD		
HU24	Inland port	Port of Budapest	Works	Port infrastructure development	Mahart	2014-2015	11.00	TBD		
EU15	Inland port	Inland ports of DE, AT, SK, RO and BG	Studies & works	TEN T Study and Pilot Action: Masterplan for LNG as fuel and a cargo on the Rhine-Main-Danube Axis. 2012-EU 18067-S	Pro Danube International	2013-2015	80.50	TEN-T + private funds	X	

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
BG7	Inland port	Ruse, Vidin plus Bourgas (other corridor)	Studies	Development of Port Community Systems Study on facilitation of multimodal transport	Bulgarian Port Infrastructure Company	2015-2019	5.11	TEN-T ERDF	X	
BG8	Inland port	Ruse, Vidin plus Bourgas (other corridor)	Studies	Updating the Master Plans of Danube River ports Updating the Master Plans for ports along the two corridors, crossing the territory of Bulgaria (Rhine - Danube and Orient/East-Mediterranean), including performance of EIAand construction of waste reception facilities.	Bulgarian Port Infrastructure Company	2015-2017	4.09	TEN-T ERDF		

RAIL/ROAD TERMINAL PROJECTS

ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
DE29	Rail/Road Terminal	Nurnberg node (DE)	Work	''Terminal Nurnberg Harbour'': Measures included: - New terminal	BMVI (Beneficiary) DB Netz AG (Implementing body)	- 2009	25.45	**Financed** 25.45 / Federal budget		X
DE30	Rail/Road Terminal	Regensburg node (DE)	Work	''Terminal Regensburg-Ost'': Measures included: - Expansion of Regensburg-Ost terminal	BMVI (Beneficiary) DB Netz AG (Implementing body)	- 2011	5.03	**Financed** 5.03 / Federal budget		X
DE31	Rail/Road Terminal	Stuttgart node (DE)	Work	''Terminal Kornwestheim'': Measures included: - Expansion and modernisation of Kornwestheim terminal	BMVI (Beneficiary) DB Netz AG (Implementing body)	- 2009	0.04	**Financed** 0.04 / Federal budget		X
DE32	Rail/Road Terminal	München node (DE)	Work	''Terminal München-Riem'': Measures included: - Expansion of München-Riem terminal (3rd module)	BMVI (Beneficiary) DB Netz AG (Implementing body)	- 2011	23.76	**Financed** 23.76 / Federal budget		X
AT40	Rail/Road Terminal	Linz Trimodal (AT)	Work	''Extension of Linz trimodal terminal'': - Land reclamation, - Extension of the container terminal, - Extension of railway tracks,	LINZ SERVICE GmbH für Infrastruktur und kommunale Dienste	2012-2014	33.74	**Financed** 1.98 / National budget 3.374 / TEN-T Annual Programme 28.386 / Promoter		X
AT41	Rail/Road Terminal	Linz Trimodal	Study	Studies for the expansion of the trimodal Port of Linz (Priority Axis 18) – (Masterplan, Traffic planning)	Linz Service GmbH für Infrastruktur und kommunale Dienste	2014-2015	1.71	**Financed**: 0.86 TEN-T Annual Programme, 0.86 Promoter		

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
AT42	Rail/Road Terminal	Linz Trimodal	Work	Implementation of the studies for the expansion of the trimodal Port of Linz	Linz Service GmbH für Infrastruktur und kommunale Dienste	2015-2024	273	TBD		
AT43	Rail/Road Terminal	Wien Freudenau Port (AT)	Work	''Extension of Container Terminal Wien Freudenau '': Extension of Container Terminal Wien Freudenau	Hafen Wien / WienCONT	2014 - open	TBD	TBD		X
AT44	Rail/Road Terminal	Wien Inzersdorf (AT)	Work	''Cargo-Center Wien'': Planning and Construction of a new Rail-Road Terminal (Cargo-Center Wien) (Phase 1) in Wien-Inzersdorf, Relocation of RRT Wien Nordwestbahnhof	ÖBB-Infrastruktur AG	2013-2017	300.30	**Financed** 298.16 / National budget 2.14 / TEN-T Annual Programme		X
AT45	Rail/Road Terminal	Wels (container terminal) (AT)	Work	''Extension of container terminal Wels Vbf'': Main objectives: Planning, design and construction of terminal Wels incl. train formation yard. Measures included: - 2 new transhipment tracks - new module of gantry crane - reconstruction of train formation yard	ÖBB-Infrastruktur AG	2014-2019	26.50	**Financed** 26.5 / National budget		X
RO52	Rail/Road Terminal	Timisoara node	Work	Building a new Rail/Road terminal	Local authorities	2011-open	18	TBD		

ID	TRANSPORT MODE	LOCATION	STUDIES OR WORK	DESCRIPTION OF PROJECT	PROJECT PROMOTER	TIMING	COSTS (IN MEUR)	FINANCING SOURCES	CRITICAL ISSUE	CEF PRE-IDENTIFIED SECTION
RO53	Rail/Road Terminal	Craiova node	Work	Building a new Rail/Road terminal	Local authorities	2015-open	10	TBD		
BG9	Rail/Road Terminal	Ruse (BG)	Study	"Construction of intermodal terminal Ruse" Main objectives: Building an intermodal terminal in Ruse to enable rail and IWW transports between Western and Eastern Europe. Measures included: - Feasibility study - Preliminary design - Cost-Benefit Analysis - Approved EIA Report - Detailed design and construction (after completed preparation phase; not included in the scope and budget of the listed project) "	Bulgarian National Railway Infrastructure Company (NRIC)	2012-2015	3.05	**Financed** 0.38 / State budget 2.16 / OPTI 0.51 / VAT	X	
SK19	Rail/Road Terminal	Žilina (SK)	Work	Construction of a public intermodal terminal in Žilina – Teplička - rail/road tracks - access and internal roads - storage, handling and parking areas - crane	Slovak railways - Železnice Slovenskej republiky	2011-2015	24.42	**Financed** 2.64 / State budget 14.95 / Cohesion Fund 6.83 / Other sources	X	X

ROAD PROJECTS

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
AT46	Road	A1: Matzleinsdorf bei Melk – Pöchlarn	Work	Upgrade of A1 motorway to 6 lanes in both directions due to traffic congestion	ASFINAG	2014–2017	31.00	**Financed** ASFINAG		
AT47	Road	A1: Pöchlarn - Ybbs	Work	Upgrade of A1 motorway to 6 lanes in both directions due to traffic congestion	ASFINAG	-2014	13.00	**Financed** ASFINAG		
AT48	Road	A4: Wien Airport – Fischamend	Works	Wien Airport – Fischamend Upgrading of motorway to 6 lanes in both directions c (length of 7,5 km	ASFINAG	2014-2015	43.00	**Financed** ASFINAG		
AT49	Road	A4: Fischamend – Neusiedl	Works	Fischamend – Neusiedl, Upgrading of A4 motorway to 6 lanes in both directions, length 24 km	ASFINAG	2018–2023	245.00	ASFINAG		
AT50	Road	Austrian Motorway TEN-T Network	Works	Ongoing or future projects: Intelligent Traffic Systems (ITS), Installation of ITS for Area Linz and Area Salzburg	ASFINAG	End of 2014	22.00	**Financed** ASFINAG		
AT51	Road	A1, A4, A8, A21 network	Works	Secure parking improvement, 5 parking areas (Ornding, Neusiedl and Parndorf, Dietrichshofen/West, Sinnersdorf Nord)	ASFINAG	2015-2019	12.70	ASFINAG		
AT52	Road	Austrian Motorway TEN-T Network (AT)	Study	Strategy to safeguard availability of alternative fuels (e.g. CNG, LPG)	ASFINAG	unknown	4.57	ASFINAG		
EU16	Road	Cross border stations of Motorway Network AT, DK, FR, DE, IT, PL, ES	Study	Regional European Electronic Toll Service (REETS TEN)	ASFINAG, AETIS	05/2013–12/2015	4.70	**Financed** 50 % TEN-T 2007-2013 50%, Consortium		

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
EU17	Road	BE, FI, FR, DE, GR, IT, IE, PT, RO, ES, SE, NL, UK	Study/Works	European ITS Platform (EIP) deployment of harmonised ITS services and the coordinated management of road transport in Europe	Sina S.p.A.	11/2013-02/2015	2.7	**Financed**: EU support: 50 %, Action promoter: 50 %		
EU18	Road	DE, GR, ES, FI, FR, IE, IT, NL, PT, RO, SE, UK	Study/Works	European ITS Platform + (EIP+) ITS interoperability and harmonised deployment in Europe: Monitor application of The Easy Way Deployment Guidelines (helpdesk and user support facility)	Sina S.p.A.	07/2014-12/2015	3.76	**Financed:** 1,44 States Budget, 0.44 Action promoter, 1.88 EU support		
EU19	Road	AT, HR, DE, SK, SI	Study/Works	Central European Green Corridors – Fast charging cross-border infrastructure for electric vehicles, connecting Austria, Slovakia, Slovenia, Germany and Croatia	Verbund AG, Bayern Innovativ, Zapadoslovenska energetika, BMW, ÖMV Refining & Marketing GmbH, Republic of Slovenia, Renault SAS, Volkswagen AG, Nissan West Europe SAS, Schrack Technik, s.r.o., City of Zagreb	03/2014-12/2015	7.12	**Financed**: Project promoter: 50%; EU support: 50%		
EU20	Road	AT, CY, CZ, DE, GR, HU, IT, PO, RO, SI	Study/Works	CROCODILE: sets up and operates a data exchange infrastructure that will be used to exchange data and information between all involved public authorities and private partners: Implement infrastructure and processes, foster cross-border coordination of ITS, provide information services to truck drivers on parking space, implement services for user information on safety critical traffic information, improve the efficiency of traffic flows and reduce congestion, stimulate investment in	AustriaTech	01/2013-12/2015	31.42	**Financed**: National budget: 20.33; Action promoter: 4.8; EU support: 20%		

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
				ITS infrastructure						
DE33	Road	A5, AS Offenburg - AS Baden Baden	Work	6 lane widening for length of 41,7km	BMVI/BW	ongoing	126.30	**Financed** public funds		
DE34	Road	A8 AS Karlsbad - AS Pforzheim-W	Work	6 lane widening for 9,2km length	BMVI/BW	ongoing	138.20	**Financed** public funds		
DE35	Road	A8 Gruibingen - AS Mühlhausen	Work	6 lane widening for length of 3,9km	BMVI/BW	ongoing	65.30	**Financed** public funds		
DE36	Road	A8 AS Pforzheim-N -AS Pforzheim-S	Work	6 lane widening for length of 3,8km	BMVI/BW	planned	98.30	public funds		
DE37	Road	A8 AS Mühlhausen – Hohenstadt	Work	6 lane widening for length of 8,3km	BMVI/BW	planned	399.40	public funds		
DE38	Road	A8 Hohenstadt - AS Ulm-Ost, A8	Work	6 lane widening for length of 27,3km	BMVI/BW	planned	237.30	public funds		
DE39	Road	A8 Ulm – Augsburg, A8	Work	6 lane widening of length of 57,5km	BMVI/BY	ongoing	197.50	**Financed** public funds		
DE40	Road	A8 AS Rosenheim – Border DE/AT	Work	6 lane widening Rosenheim-Achenmühle Achenmühle-Bernauer Berg	BMVI/BY	2016-2021 (section 1) 2017-2023 (section 2)	311.00 (sec 1: 133.00, sec 2: 178.00)	public funds		
DE41	Road DE	A3, Frankfurt-Nürnberg	Work	Capacity and safety limitation by two lanes – 6-lane upgrade of the A3 Kauppenaufstieg federal highway	BMVI/BY	2013-2015	60.90	**Financed** 90 % public funds, 10 % EU support TEN-T		

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
DE42	Road	A3 AS Wertheim - AS Marktheidenfeld	Work	6 lane widening (9,7km)	BMVI/BY	TBD	61.40	public funds		
DE43	Road	A3, Haseltalbrücke - AS Rohrbrunn	Work	6 lane widening (4,1km)	BMVI/BY	TBD	60.90	public funds		
DE44	Road	A3, AS Rohrbrunn – Kauppenbrücke	Work	6 lane widening (8,0km)	BMVI/BY	2015	84.50	90 % public funds, 10 % EU support TEN-T		
DE45	Road	A3, A5, A8, A67	Work	Secure parking improvement, 39 parking areas	BMVI/BY,BW, HE	between 2013-2023	183.70	public funds		
CZ47	Road	D1 Praha Jesenice-Brno Ostopovice	Work/study	Upgrading of D1 – Modernization of section Mirošovice – Kývalka. This modernization will include widening of the width parameters, rebuilding of some bridges and also implementation of some new telematics systems.	Road and Motorway Directorate of the Czech Republic (RSD CR), MoT	2014-2022	532.00	45 % public funds 34 % OPT II CF 21 %OPT I		
CZ48	Road	R49 Hulín – Fryšták	Work	The implementation of the first part of the cluster alone will contribute to an improvement of the transport services for the regional capital Zlín and together with the adjacent section planned for completion after 2020, it will completely take through traffic away from the present-day city centre thoroughfare,	RSD, MoT	2014-2018	258.00	Public funds OPT II		x
CZ49	Road	R49 Fryšták- Lípa	Work	Upgrading R49, Fryšták- Lipa (for increasing the absorption capacity and overall improvement of road connection with Slovakia)	RSD, MoT	2017-2020	149.00	Public funds OPT II		x
CZ50	Road	R49 Lípa– Horní Lideč	Works	Upgrading R49 Lípa to Slovak Border (for increasing the absorption capacity and overall improvement of road connection with Slovakia)	RSD, MoT	2035	TBD	TBD		x

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
CZ51	Road	D1 Kývalka – Holubice	work	Upgrading D1 Kývalka – Holubice (for increasing the absorption capacity)	RSD, MoT	2035	TBD	TBDTBD		
CZ52	Road	Czech Republic	Work	Introduction and development of ITS for road transport on highways, limited access highways and 1st class roads (incl. operation of toll-system): data collection, traffic information services and traffic management, electronic toll system, eCall service	MoT	2014-2023	1,300.00			
CZ53	Road	Czech Republic: Core network/comprehensive network	Works / study	Safety and the environment; main objectives: Safety and the environment; measure: use of road traffic control systems for traffic safety, equipment for monitoring observance of emission limits, adjustments of accident localities	Ministry of Transport	2015-2023	69.1			
SK20	Road	D1 from Hričovské Podhradie to Lietavská Lúčka (SK)	works	under construction (2014)	NDS	2014-2018	483.12	OP Transport and OP Integrated Infrastructure		
SK21	Road	D1 Lietavská Lúčka - Višňové - Dubná Skala	Works	Construction of new section, 1st + 2nd phase; Status: under preparation (2014), (13.5 km)	NDS	2014-2019	400.07	OP Transport and OP Integrated Infrastructure		
SK22	Road	D1 from Dubná Skala to Turany	Works	Under construction (2014)	NDS	2011-2015	158.85	OP Transport		
SK23	Road	D1 from Turany to Hubová	Works	Construction of new section, Status: Under preparation 2014) (13.6 km)	NDS	2016-2019	TBD	TBD		
SK24	Road	D1 Hubová - Ivachnová	Works	Construction of new section; Status: Under construction (2014) (15.3 km)	NDS	2013-2017	265.33	OP Transport and OP Integrated Infrastructure		

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
SK25	Road	D1 from Janovce to Jablonov	Works	Status under construction	NDS	2011-2015	232.58	OP Transport		
SK26	Road	D1 from Branisko to Beharovce	Works	Status: halfway under preparation (2014)	NDS	2020-2025	208.32	TBD		
SK27	Road	D1 from Fričovce to Svinia	Works	Status: under construction (2014	NDS	2011-2015	137.68	OP Transport		
SK28	Road	D1 Prešov západ - Prešov juh	Works	Status: under preparation	NDS	2015-2019	307.47	OP Integrated Infrastructure		
SK29	Road	D1 Prešov západ - Prešov juh	Study	Status: under preparation (2014)	NDS	2014-2015	TBD	NDS sources		
SK30	Road	D1 Budimír – Bidovce	Works	construction of new section (14.4 km)	NDS	2015-2018	209.02	OP Integrated Infrastructure		
SK31	Road	D1 Bidovce – Dargov - Pozdišovce – border SK/UA	Works	D1 from Bidovce via Dargov and Pozdisovce to Border (UA) -> Status: unfinished EIA process	NDS	After year 2020	TBD	TBD		
SK32	Road	D1 Prešov - Budimír	Work	exchange and completion of safety intercepting devices, modernisation and safety	NDS	2016	15.96	TBD		
SK33	Road	D1 Ivachnová - Važec	Works	exchange and completion of safety intercepting devices; modernisation and safety	NDS	2015-2016	32.75	TBD		
SK34	Road	D1 Privádzač Lietavská Lúčka – Žilina	Works	construction of new section (5.1 km)	NDS	2016-2018	74.32	OP Integrated Infrastructure		
SK35	Road	Zlín – Žilina cross border (CZ/SK)	Study & works	R49 Hulín – border CZ/SK - Púchov R6	NDS	2012-2015	TBD	TBD	x	x

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
HU25	Road	HU Motorway M15 expressway section between M1 motorway and Rajka Hu-SK border	Works	Construction of second carriageway of 2x2 lanes motorway, aiming to increase capacity and improve traffic safety (14 km) Environmental permits in progress. Slovakian part is completed	Government	2016-2018	29.45	Connection Europe Facility (CEF)		x
HU26	Road	M1 motorways Lajta stop (near Mosonmagyaróvár)	work	"M1 motorway, Lajta stop (near Mosonmagyaróvár), Axle load measurment station. Implementation of National Road Protecting System (RPN/ÚVR). Building permission is available.	Government	2015-2016	2.03	ITOP/IKOP; Cohesion Fund		
HU27	Road	M1 motorway Hegyeshalom HU-AT border	work	"M1: Hegyeshalom border, Eliminating barriers (e.g. former border-crossing facilities).	Government	2017-2020	17.74	ITOP/IKOP; Cohesion Fund		
HU28	Road	HU Motorway M0 Southern Section (between M1 and M5 motorways)	Works	M0: Southern section upgrade (1st phase) Building permission and construction plans are available.	Government	2015-2017	70.34	ITOP/IKOP; Cohesion Fund		

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
HU29	Road	M0 motorway around Budapest: Western section between main road no. 10. and 1.	Study	"Western section between ""main road no. 10. - main road no. 1."" (2x2 lanes) - preparation // Public procurement in progress (for Environmental Impact Assessment - EIA)."	Government	2014-2018	17.74	TOP (KözOP) + ITOP (IKOP); Cohesion Fund		
HU30	Road	M0 motorway around Budapest: Western section between main road no. 10. and 1.	Work	Western section between "main road no. 10. - main road no. 1." (2x2 lanes)	Government	2020 - 2023	N/A	TOP (KözOP) + ITOP (IKOP); Cohesion Fund		
HU31	Road	TEN-T road network	Work	Road pavement upgrade, traffic safety and environmental interventions on high volume sections.	Government	2015-2015	94.66	ITOP/IKOP; Cohesion Fund		

ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
HU32	Road	TEN-T road network	Work	Service level, sustainability, operation support devices and machinary upgrade on the TERN sections of Hungary	Government	2015	8.20	KözOP/TOP + ITOP/IKOP; Cohesion Fund		
HU33	Road	TEN-T road network	Work	Service level, sustainability, operation development of facilities on the TERN sections of Hungary	Government	2015	1.50	KözOP/TOP + ITOP/IKOP; Cohesion Fund		
RO54	Road	Nădlac – Arad	Works	new motorway construction 2x2 lines on 38.882 km and a connection road between Nădlac and DN7 on 5.91 km	CNADNR	2015	296.77	**Financed**: 205.85 mn/ Cohesion Fund 85% co-financed by Cohesion Fund		
RO55	Road	Arad – Timișoara	Works	New motorway construction 2x2 lines on 44.50 km, from which 12.5 km are for Arad bypass	CNADNR	2015	384.22	**Financed**: 117.70 mn/ Cohesion Fund		
RO56	Road	Timișoara– Lugoj	Works	New motorway construction 2x2 lines on 25.625 km, and 9.5 km for Timișoara bypass-Lot1,	CNADNR	2019	293.94	**Financed**: 202.85mn/ Cohesion Fund 85% co-financed by Cohesion Fund		

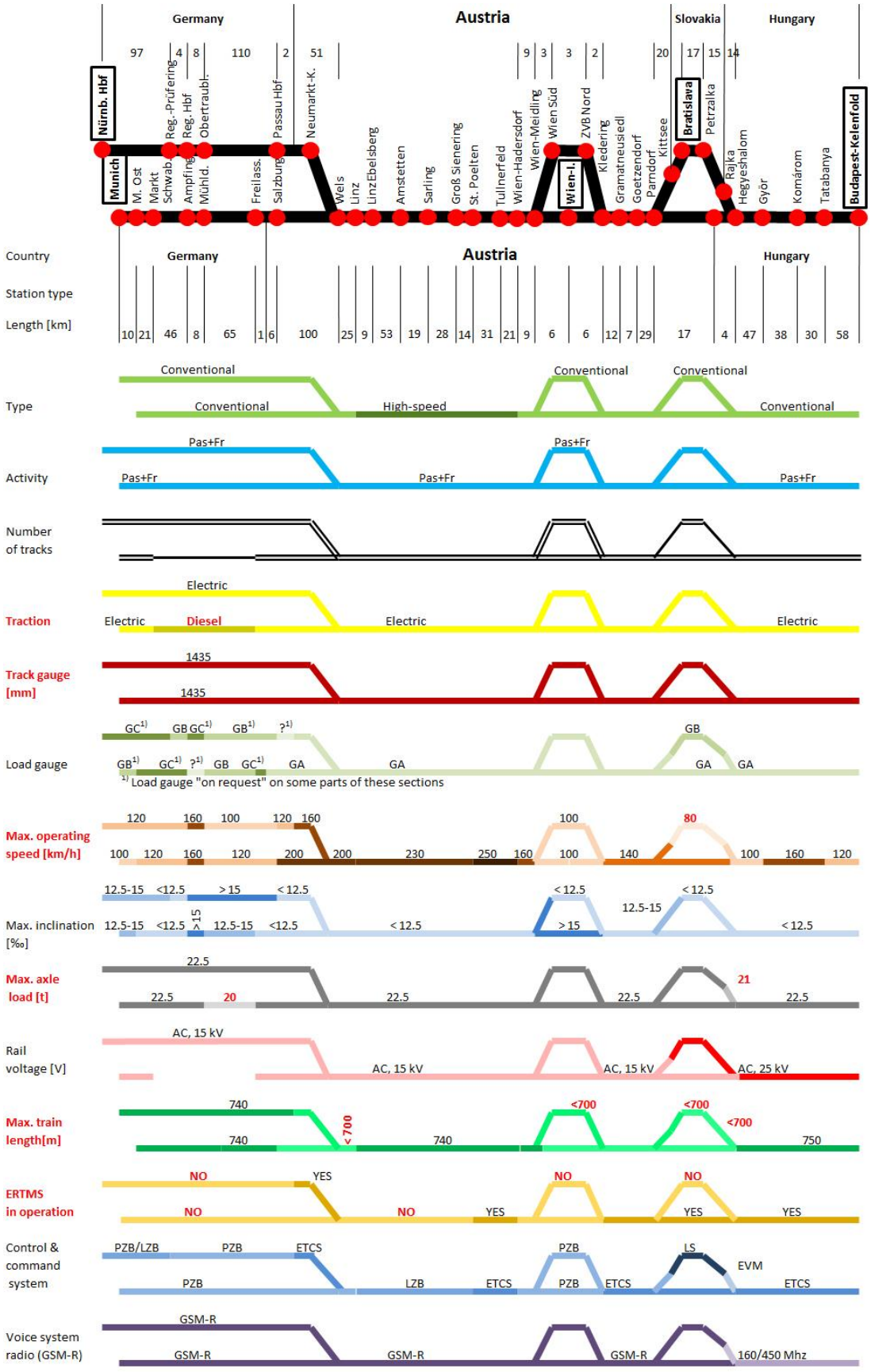
ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
RO57	Road	Lugoj – Dumbrava	Works	New motorway construction 2x2 lines on 27.472 km, and 11.4 km for a connection road between the new motorway construction and Lugoj bypass,	CNADNR	2018	252.27	**Financed**: 172.70 mn / Cohesion Fund		
RO58	Road	Dumbrava – Deva	Works	New motorway construction 2x2 lines on 71.88 km.	CNADNR	2016	600.00	**Financed**: 85 % co-financed by Cohesion Fund		
RO59	Road	Orastie – Sibiu	Works	New motorway construction 2x2 lines on 82.07 km, between Orastie and Sibiu	CNADNR	2017	715.60	**Financed**: 392.78 mn/ Cohesion Fund		
RO60	Road	Cernavoda – Constanta	Works	New motorway construction 2x2 lines on 51.3 km, between Cernavoda and Constanta	CNADNR	2016	409.32	**Financed**: 67 mn Cohesion Fund	x	
RO61	Road	Sibiu - Curtea de Argeș - Pitești	Study & Works	completion of TEN-T core corridor RD, road component	CNADNR	2022	1,900.00 (express road) 2,270.00 (motorway)	85 % co-financed by Cohesion Fund (secured when GMT is finally approved)		
RO62	Road	Lugoj – Craiova	Study	New construction: Expressway on TEN-T Core corridor	CNADNR	2020–2030	1.81	Cohesion Fund / FEDR		
RO63	Road	Craiova (RO)-Calafat (BG)	Works	Upgrade: EuroTrans on TEN-T Core corridor	CNADNR	2014–2020	41.50	**Financed**: FEDR		
RO64	Road	Drobeta Tr. Severin (RO) – Calafat (BG)	Works	Upgrade: EuroTrans on TEN-T Core corridor	CNADNR	2020-2030	50.80	FEDR		
RO65	Road	Craiova – București	Works	Upgrade: TransRegio on TEN-T Core corridor	CNADNR	2020-2030	103.00	FEDR		

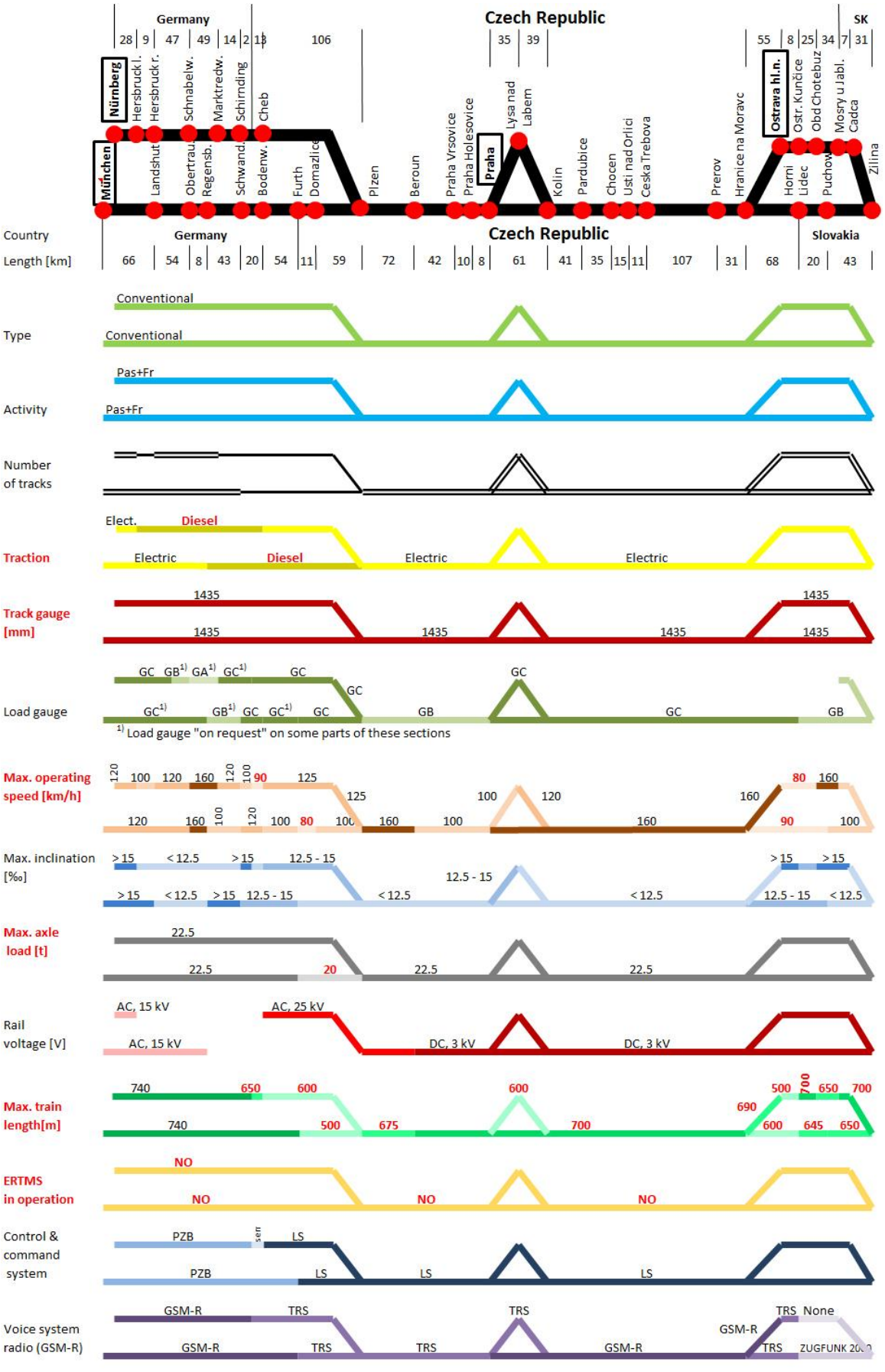
ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
RO66	Road	Timișoara–Moravița	Works	Upgrade: EuroTrans on TEN-T Core corridor	CNADNR	2014–2020	29.50	FEDR		
RO67	Road	Alexandria-Craiova	Study	Technical study and consultation	CNADNR	2009	1.89	1.42 / ISPA		
RO68	Road	Alexandria-Craiova	Works	Rehabilitation of 127,097 km of DN 6 (km 90+190 – km 222+182); rehabilitation for 17 bridges, 6 long term stops; part of Craiova-Bucuresti)	CNADNR	2015	192.48	**Financed**: FEDR		

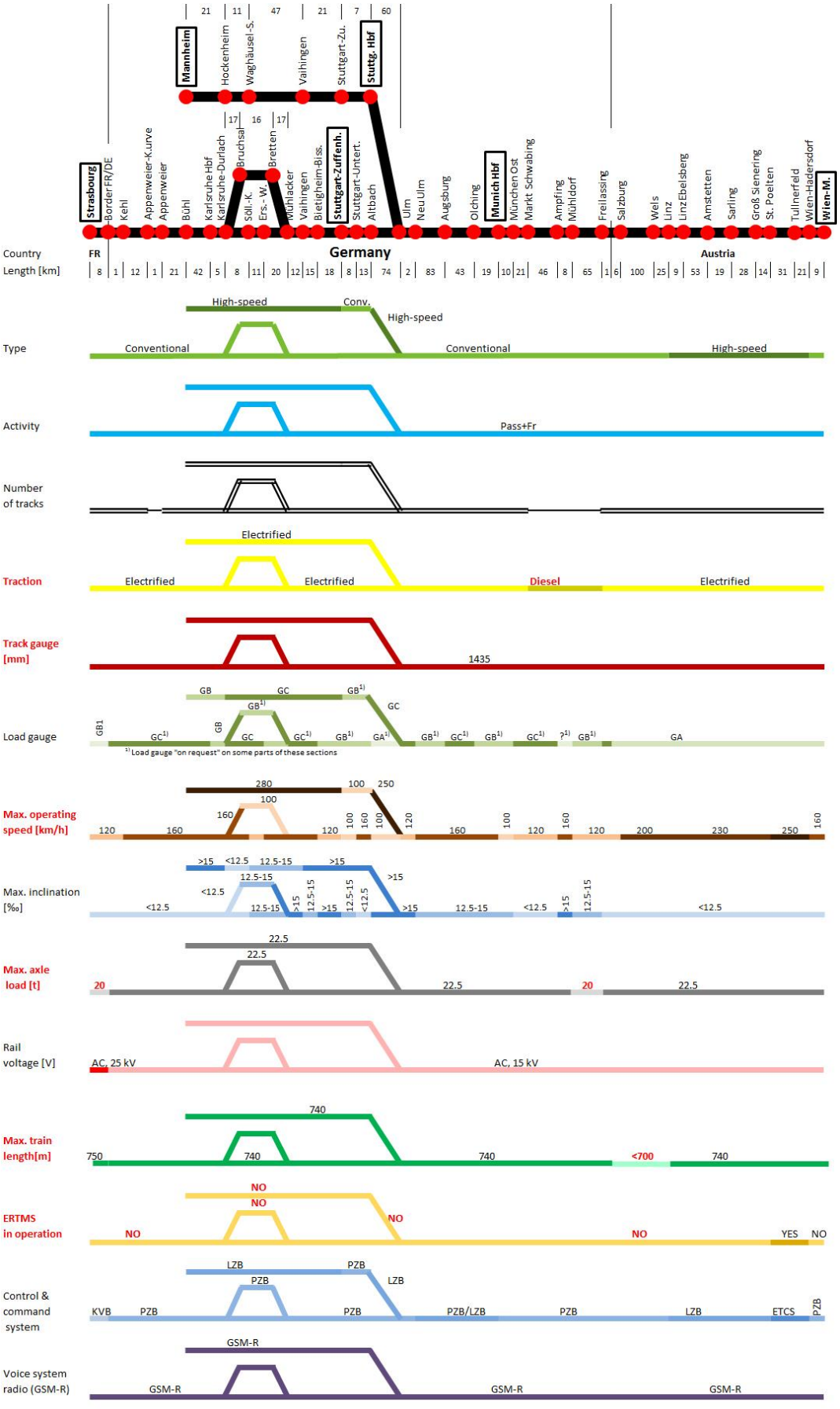
AIRPORT PROJECTS

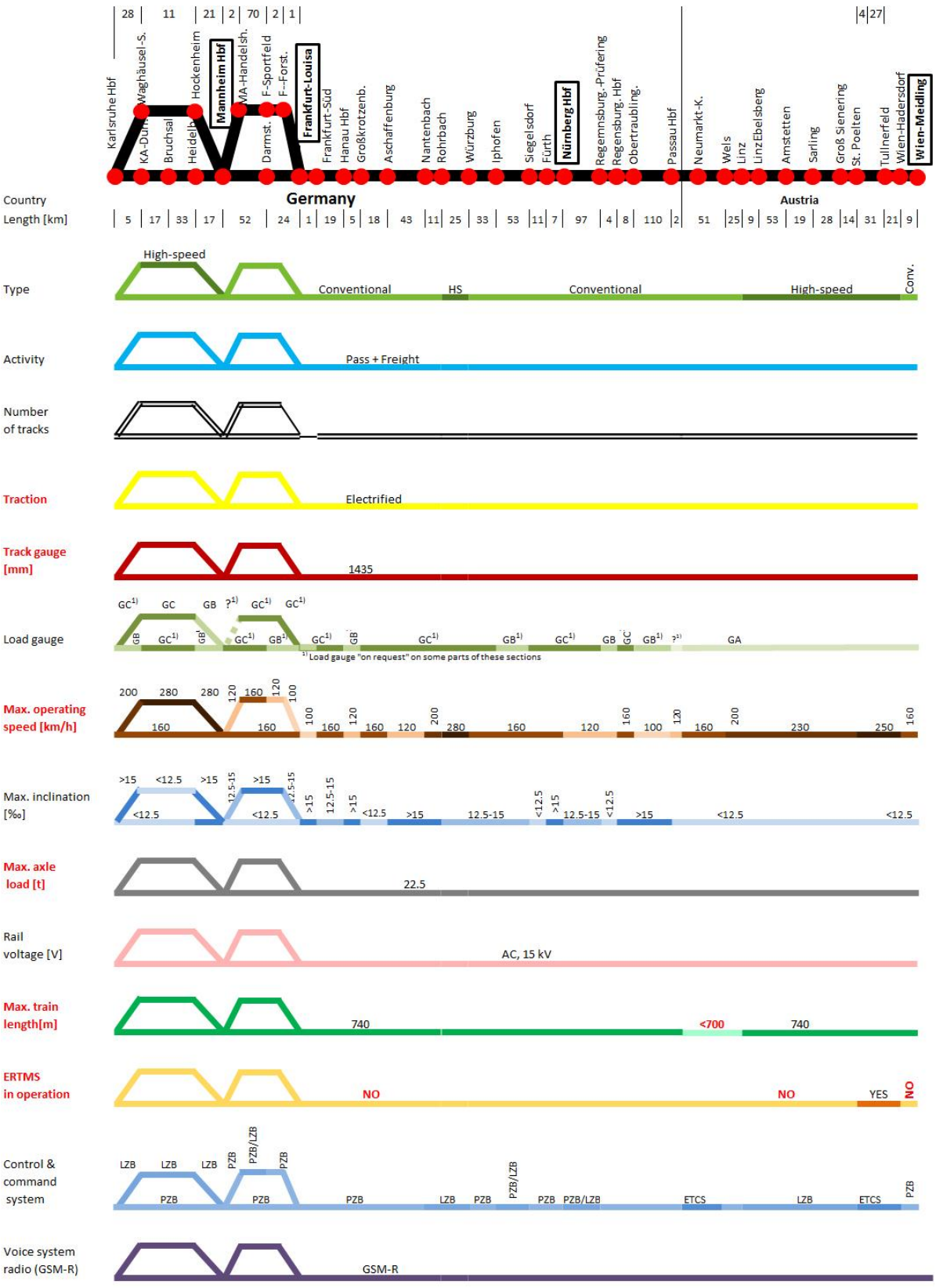
ID	Transport mode	Location	Studies or work	Description of project	Project promoter	Timing	Costs (in MEUR)	Financing sources	Critical issue	CEF pre-identified section
DE46	Rail / Airport Integration	München	Work	New tunnel for new railway connection from the airport towards the east, in the direction of Erding („Erdinger Ringschluss")		2018-2022	70-80			
DE47	Airport	München	Work	Parking area: PCA (Pre Conditioned Air)		ongoing	35			
DE48	Airport	München	Work	MTA (Mobile Travel Assistent), White Label App (cooperation of German airports & ADV)		ongoing	1.5			
CZ54	Rail / Airport Integration	Praha	Study	Modernization of the railway line Praha - Kladno with connection to Václav Havel Main objective: connection of Vaclav Havel International Airport by rail, addressing also transport service for the area. Measures included: - Construction of new line to the airport	Railway Infrastructure Administration, state organization (RIA)	2019-2022	343	State 172		

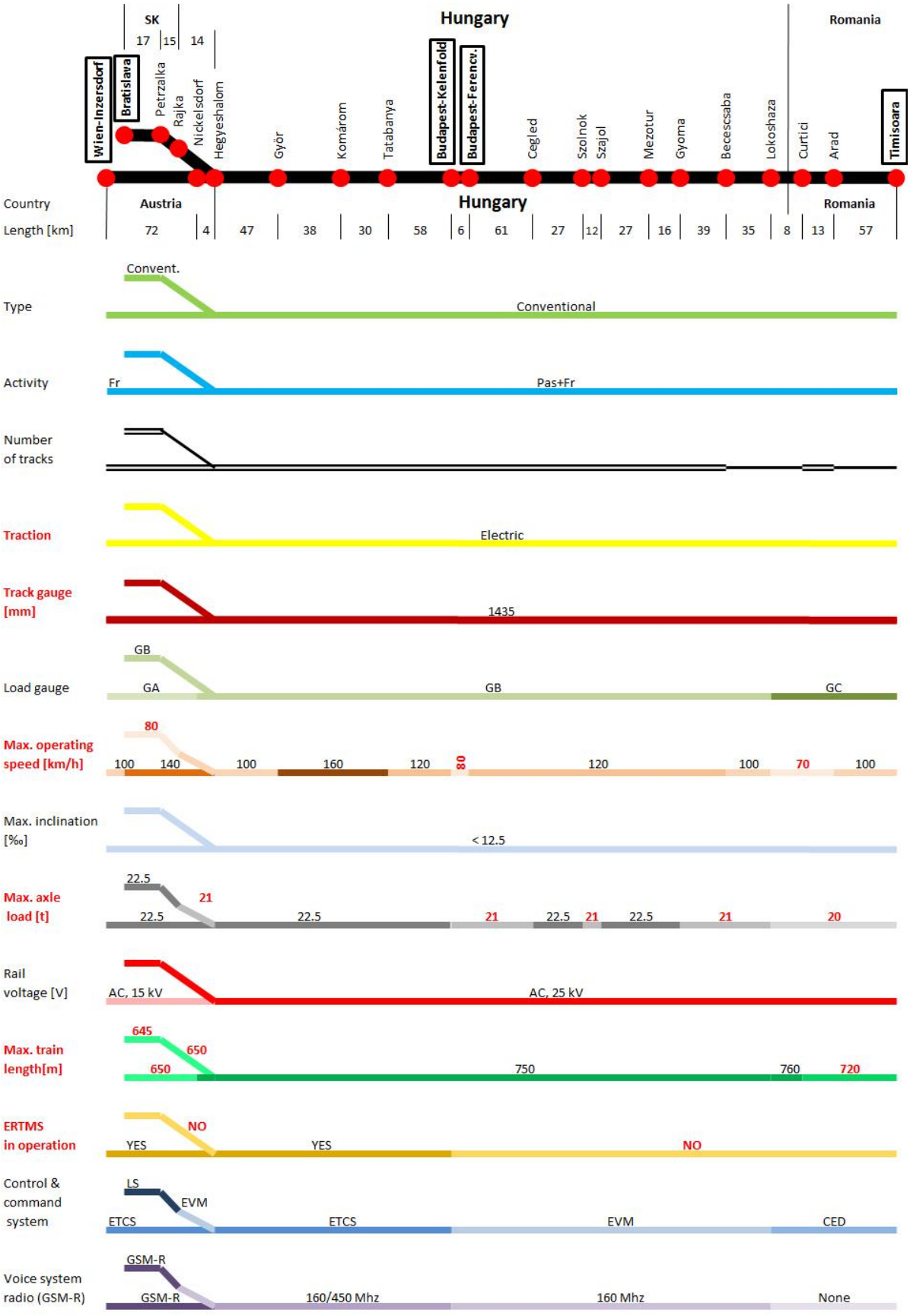
ANNEX III – COUNTRY CHARTS RAIL PARAMETER

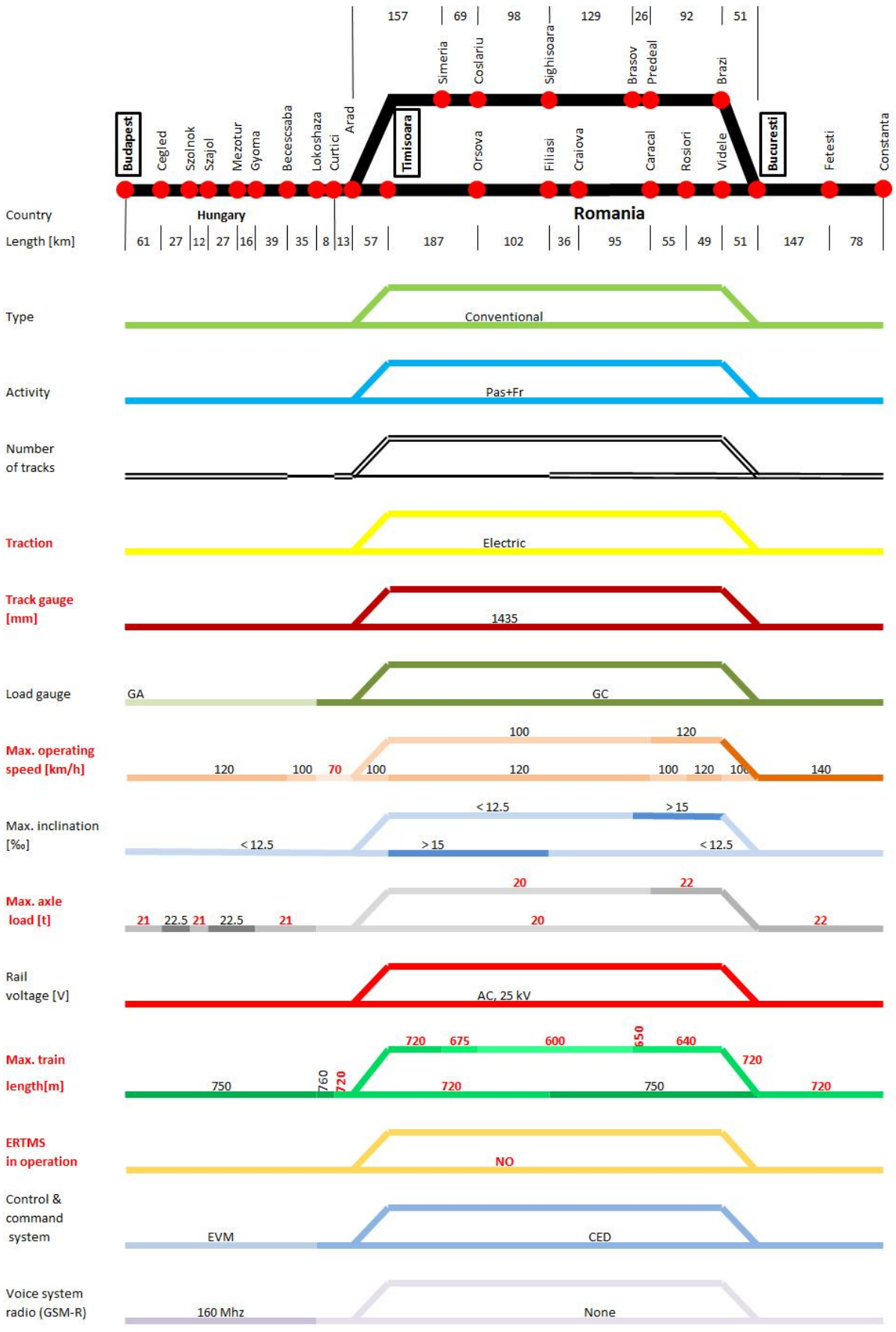

Germany
Austria
Slovakia
Hungary
97 4 8 110 2 51 9 3 3 2 20 17 15 14
Nürnb. Hbf
Reg.-Prüfering
Reg. Hbf
Obertraubl.
Passau Hbf
Neumarkt-K.
Wien Süd
ZVB Nord
Bratislava
Petrzalka
Munich
M. Ost
Markt Schwab
Ampfing
Mühld.
Freilass.
Salzburg
Wels
Linz
Linz Ebelsberg
Amstetten
Sarling
Groß Sienering
St. Poelten
Tullnerfeld
Wien-Hadersdorf
Wien-Meidling
Wien-I.
Kledering
Gramatneusiedl
Goetzendorf
Parndorf
Kittsee
Rajka
Hegyeshalom
Győr
Komárom
Tatabanya
Budapest-Kelenfold
Country
Station type
Length [km]
10 21 46 8 65 1 6 100 25 9 53 19 28 14 31 21 9 6 6 12 7 29 17 4 47 38 30 58
Type
Activity
Number of tracks
Traction
Track gauge [mm]
1435
Load gauge
GC GB GC GB ? GB
GB GC ? GB GC GA GA GA GA
1) Load gauge "on request" on some parts of these sections
Max. operating speed [km/h]
120 160 100 120 160 100 80
100 120 160 120 200 200 230 250 160 100 140 100 160 120
Max. inclination [‰]
12.5-15 <12.5 >15 <12.5 <12.5 >15 12.5-15 <12.5 <12.5
Max. axle load [t]
22.5 20 21
Rail voltage [V]
AC, 15 kV
AC, 25 kV
Max. train length[m]
740 <700 750
ERTMS in operation
NO YES
Control & command system
PZB/LZB PZB ETCS PZB LS EVM
PZB LZB ETCS PZB ETCS ETCS
Voice system radio (GSM-R)
GSM-R
160/450 Mhz

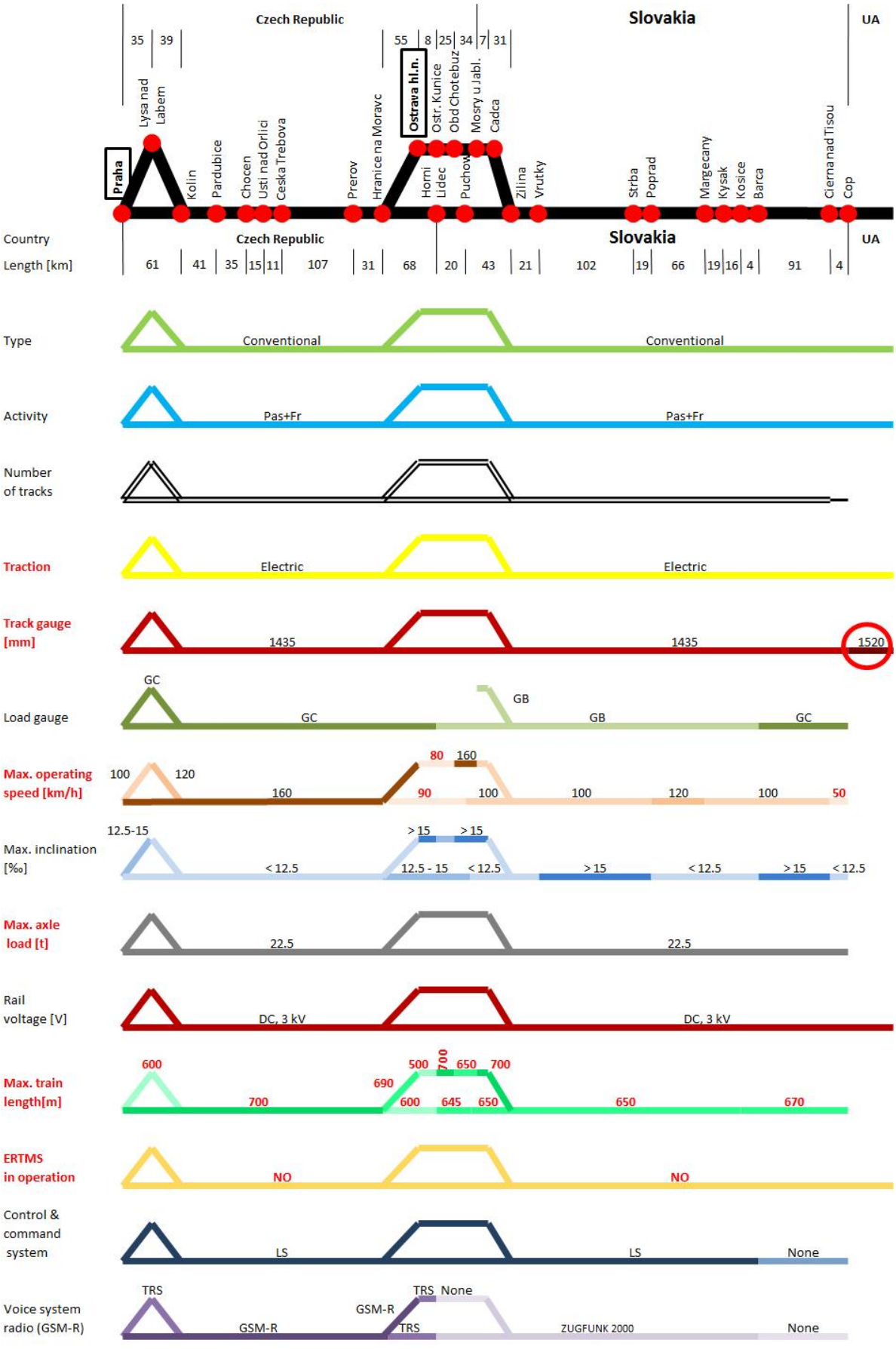

Germany
Czech Republic
SK
28 9 47 49 14 2 13 106 35 39 55 8 25 34 7 31
Nürnberg
Hersbruck l.
Hersbruck r.
Schnabelw.
Marktredw.
Schirnding
Cheb
München
Landshut
Obertraub.
Regensb.
Schwand.
Bodenw.
Furth
Domazlice
Plzen
Beroun
Praha Vrsovice
Praha Holesovice
Praha
Lysa nad Labem
Kolin
Pardubice
Chocen
Usti nad Orlici
Ceska Trebova
Prerov
Hranice na Moravc
Ostrava hl.n.
Horni Lidec
Ostr. Kunčice
Obd Chotebuz
Puchov
Mosry u Jabl.
Cadca
Zilina
Country
Germany
Czech Republic
Slovakia
Length [km]
66 54 8 43 20 54 11 59 72 42 10 8 61 41 35 15 11 107 31 68 20 43
Type
Conventional
Activity
Pas+Fr
Number of tracks
Traction
Elect.
Diesel
Electric
Track gauge [mm]
1435
Load gauge
GC GB1) GA1) GC1)
1) Load gauge "on request" on some parts of these sections
Max. operating speed [km/h]
Max. inclination [‰]
Max. axle load [t]
22.5
20
Rail voltage [V]
AC, 15 kV
AC, 25 kV
DC, 3 kV
Max. train length[m]
740 650 600 500 675 700 690 645
ERTMS in operation
NO
Control & command system
PZB
LS
Voice system radio (GSM-R)
GSM-R
TRS
None
ZUGFUNK


Strasbourg
Mannheim
Stuttg. Hbf
Stuttgart-Zuffenh.
Munich Hbf
Wien-M.
Country
Length [km]
FR
Germany
Austria
Type
High-speed
Conv.
Conventional
Activity
Pass+Fr
Number of tracks
Traction
Electrified
Diesel
Track gauge [mm]
1435
Load gauge
Load gauge "on request" on some parts of these sections
Max. operating speed [km/h]
Max. inclination [‰]
Max. axle load [t]
Rail voltage [V]
AC, 25 kV
AC, 15 kV
Max. train length[m]
ERTMS in operation
NO
YES
Control & command system
KVB
PZB
LZB
PZB/LZB
ETCS
Voice system radio (GSM-R)
GSM-R


28 | 11 | 21 | 2 | 70 | 2 | 1 | 4 | 27
Karlsruhe Hbf
KA-Durl.
Waghäusel-S.
Bruchsal
Heidelb.
Hockenheim
Mannheim Hbf
MA-Handelsh.
Darmst.
F-Sportfeld
F.-Forst.
Frankfurt-Louisa
Frankfurt-Süd
Hanau Hbf
Großkrotzenb.
Aschaffenburg
Nantenbach
Rohrbach
Würzburg
Iphofen
Siegelsdorf
Fürth
Nürnberg Hbf
Regensburg.-Prüfering
Regensburg. Hbf
Obertraubling.
Passau Hbf
Neumarkt-K.
Wels
Linz
LinzEbelsberg
Amstetten
Sarling
Groß Sienering
St. Poelten
Tullnerfeld
Wien-Hadersdorf
Wien-Meidling
Country
Germany
Austria
Length [km]
5 | 17 | 33 | 17 | 52 | 24 | 1 | 19 | 5 | 18 | 43 | 11 | 25 | 33 | 53 | 11 | 7 | 97 | 4 | 8 | 110 | 2 | 51 | 25 | 9 | 53 | 19 | 28 | 14 | 31 | 21 | 9
Type
High-speed
Conventional
HS
Conventional
High-speed
Conv.
Activity
Pass + Freight
Number of tracks
Traction
Electrified
Track gauge [mm]
1435
Load gauge
GC¹) GC GB ?¹) GC¹) GC¹)
GB GC¹) GB GC¹) GB¹) GC¹) GB GC¹) GB¹) GC¹) GB GC GB¹) ?¹) GA
¹) Load gauge "on request" on some parts of these sections
Max. operating speed [km/h]
200 280 280 120 160 120 100
160 160 100 160 120 160 120 200 280 160 120 160 100 120 160 200 230 250 160
Max. inclination [‰]
>15 <12.5 >15 12.5-15 >15 12.5-15
<12.5 <12.5 >15 12.5-15 >15 <12.5 >15 12.5-15 <12.5 >15 12.5-15 <12.5 >15 <12.5 <12.5
Max. axle load [t]
22.5
Rail voltage [V]
AC, 15 kV
Max. train length[m]
740 <700 740
ERTMS in operation
NO NO YES NO
Control & command system
LZB LZB LZB PZB PZB/LZB PZB
PZB PZB PZB LZB PZB PZB/LZB PZB PZB/LZB ETCS LZB ETCS PZB
Voice system radio (GSM-R)
GSM-R


SK
17
15
14
Hungary
Romania
Wien-Inzersdorf
Bratislava
Petrzalka
Rajka
Nickelsdorf
Hegyeshalom
Győr
Komárom
Tatabanya
Budapest-Kelenfold
Budapest-Ferencv.
Cegled
Szolnok
Szajol
Mezotur
Gyoma
Bececsaba
Lokoshaza
Curtici
Arad
Timisoara
Country
Austria
Hungary
Romania
Length [km]
72
4
47
38
30
58
6
61
27
12
27
16
39
35
8
13
57
Type
Convent.
Conventional
Activity
Fr
Pas+Fr
Number of tracks
Traction
Electric
Track gauge [mm]
1435
Load gauge
GB
GA
GB
GC
Max. operating speed [km/h]
80
100
140
100
160
120
80
120
100
70
100
Max. inclination [‰]
< 12.5
Max. axle load [t]
22.5
21
22.5
22.5
21
22.5
21
22.5
21
20
Rail voltage [V]
AC, 15 kV
AC, 25 kV
Max. train length[m]
645
650
650
750
760
720
ERTMS in operation
NO
YES
YES
NO
Control & command system
LS
EVM
ETCS
ETCS
EVM
CED
Voice system radio (GSM-R)
GSM-R
GSM-R
160/450 Mhz
160 Mhz
None


157
69
98
129
26
92
51
Simeria
Coslariu
Sighisoara
Brasov
Predeal
Brazi
Budapest
Cegled
Szolnok
Szajol
Mezotur
Gyoma
Bececsaba
Lokoshaza
Curtici
Arad
Timisoara
Orsova
Filiasi
Craiova
Caracal
Rosiori
Videle
Bucuresti
Fetesti
Constanta
Country
Hungary
Romania
Length [km]
61
27
12
27
16
39
35
8
13
57
187
102
36
95
55
49
51
147
78
Type
Conventional
Activity
Pas+Fr
Number of tracks
Traction
Electric
Track gauge [mm]
1435
Load gauge
GA
GC
Max. operating speed [km/h]
120
100
70
100
120
100
120
100
120
140
Max. inclination [‰]
< 12.5
> 15
< 12.5
> 15
< 12.5
Max. axle load [t]
21
22.5
21
22.5
21
20
20
22
22
Rail voltage [V]
AC, 25 kV
Max. train length[m]
750
760
720
720
675
600
650
640
720
720
750
720
ERTMS in operation
NO
Control & command system
EVM
CED
Voice system radio (GSM-R)
160 Mhz
None


Czech Republic
Slovakia
UA
35
39
55
8
25
34
7
31
Lysa nad Labem
Praha
Kolin
Pardubice
Chocen
Usti nad Orlici
Ceska Trebova
Prerov
Hranice na Moravc
Ostrava hl.n.
Ostr. Kunice
Obd Chotebuz
Mosry u Jabl.
Cadca
Horni Lidec
Puchov
Zilina
Vrutky
Strba
Poprad
Margecany
Kysak
Kosice
Barca
Cierna nad Tisou
Cop
Country
Length [km]
61
41
35
15
11
107
31
68
20
43
21
102
19
66
19
16
4
91
4
Type
Conventional
Activity
Pas+Fr
Number of tracks
Traction
Electric
Track gauge [mm]
1435
1520
Load gauge
GC
GB
Max. operating speed [km/h]
100
120
160
80
90
Max. inclination [‰]
12.5-15
< 12.5
> 15
12.5 - 15
Max. axle load [t]
22.5
Rail voltage [V]
DC, 3 kV
Max. train length[m]
600
700
690
500
600
645
650
670
ERTMS in operation
NO
Control & command system
LS
None
Voice system radio (GSM-R)
TRS
GSM-R
ZUGFUNK 2000

ANNEX IV – SECTIONS NOT IN LINE WITH REGULATION

Black Sea Branch – Insufficient Sections

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
FR	Strasbourg JCT	Border F/D II / Bundesgrenze F/D	7.7	Electrified	1435	120	200	750	NO
SPACER_FR									
DE	Kehl Grenze	Kehl	0.4	Electrified	1435	120	225	740	NO
DE	Kehl	Kork	5.2	Electrified	1435	160	225	740	NO
DE	Kork	Legelshurst	3.2	Electrified	1435	160	225	740	NO
DE	Legelshurst	Appenweier Kurve	4	Electrified	1435	160	225	740	NO
DE	Appenweier Kurve	Appenweier	1.2	Electrified	1435	160	225	740	NO
DE	Appenweier	Achern	13.7	Electrified	1435	250	225	740	NO
DE	Achern	Ottersweier	4.9	Electrified	1435	250	225	740	NO
DE	Ottersweier	Bühl (Baden) F	3.2	Electrified	1435	250	225	740	NO
DE	Bühl (Baden) F	Baden-Baden	10.7	Electrified	1435	250	225	740	NO
DE	Baden-Baden	Rastatt-Süd	4	Electrified	1435	250	225	740	NO
DE	Rastatt-Süd	Rastatt	4.2	Electrified	1435	160	225	740	NO
DE	Rastatt	Ötigheim	2.9	Electrified	1435	160	225	740	NO

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
DE	Ötigheim	Bietigheim (Baden)	2.8	Electrified	1435	160	225	740	NO
DE	Bietigheim (Baden)	Durmersheim	2.3	Electrified	1435	160	225	740	NO
DE	Durmersheim	Durmersheim Nord	1.1	Electrified	1435	160	225	740	NO
DE	Durmersheim Nord	Forchheim (b Karlsruhe)	5.2	Electrified	1435	160	225	740	NO
DE	Forchheim (b Karlsruhe)	Karlsruhe-Dammerstock	3.1	Electrified	1435	160	225	740	NO
DE	Karlsruhe-Dammerstock	Karlsruhe Hbf	2.5	Electrified	1435	160	225	740	NO
DE	Karlsruhe Hbf	Karlsruhe-Durlach	4.7	Electrified	1435	160	225	740	NO
DE	Karlsruhe-Durlach	Grötzingen	2.5	Electrified	1435	160	225	740	NO
SPACER_DE									
DE	Grötzingen	Söllingen Reetzstraße	4.7	Electrified	1435	160	225	740	NO
DE	Söllingen Reetzstraße	Söllingen (b Karlsruhe)	0.4	Electrified	1435	160	225	740	NO
DE	Söllingen (b Karlsruhe)	Söllingen Kapellenstraße	0.7	Electrified	1435	160	225	740	NO
DE	Söllingen Kapellenstraße	Kleinsteinbach	2	Electrified	1435	120	225	740	NO
DE	Kleinsteinbach	Wilferdingen-Singen	2.1	Electrified	1435	120	225	740	NO
DE	Wilferdingen-Singen	Königsbach (Baden)	2.9	Electrified	1435	120	225	740	NO
DE	Königsbach (Baden)	Bilfingen	1.8	Electrified	1435	120	225	740	NO
DE	Bilfingen	Ersingen West	2.3	Electrified	1435	120	225	740	NO
DE	Ersingen West	Ersingen	0.4	Electrified	1435	160	225	740	NO
DE	Ersingen	Ispringen West	2.3	Electrified	1435	160	225	740	NO

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
DE	Ispringen West	Ispringen	0.8	Electrified	1435	160	225	740	NO
DE	Ispringen	Pforzheim Hbf	3.4	Electrified	1435	160	225	740	NO
DE	Pforzheim Hbf	Eutingen (Baden)	3.6	Electrified	1435	160	225	740	NO
DE	Eutingen (Baden)	Niefern	2.2	Electrified	1435	160	225	740	NO
DE	Niefern	Enzberg	2.7	Electrified	1435	160	225	740	NO
DE	Enzberg	Mühlacker	4.1	Electrified	1435	160	225	740	NO
SPACER_DE									
DE	Bruchsal	Bruchsal Ost	1.8	Electrified	1435	100	225	740	NO
DE	Bruchsal Ost	Bruchsal Tunnelstraße	0.1	Electrified	1435	100	225	740	NO
DE	Bruchsal Tunnelstraße	Bruchsal Schlachthof	1.2	Electrified	1435	100	225	740	NO
DE	Bruchsal Schlachthof	Heidelsheim Nord	3.2	Electrified	1435	160	225	740	NO
DE	Heidelsheim Nord	Heidelsheim	0.5	Electrified	1435	160	225	740	NO
DE	Heidelsheim	Helmsheim	1.8	Electrified	1435	160	225	740	NO
DE	Helmsheim	Gondelsheim Schloßstadion	2.4	Electrified	1435	160	225	740	NO
DE	Gondelsheim Schloßstadion	Gondelsheim (Baden)	0.7	Electrified	1435	100	225	740	NO
DE	Gondelsheim (Baden)	Diedelsheim	2.5	Electrified	1435	100	225	740	NO
DE	Diedelsheim	Bretten	1.5	Electrified	1435	120	225	740	NO
DE	Bretten	Bretten Rechberg	0.8	Electrified	1435	100	225	740	NO
DE	Bretten Rechberg	Bretten Streckenwechsel 4130/4800	0.3	Electrified	1435	100	225	740	NO

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
DE	Bretten Streckenwechsel 4130/4800	Bretten-Ruit	3	Electrified	1435	100	225	740	NO
DE	Bretten-Ruit	Knittlingen-Kleinvillars	2.5	Electrified	1435	100	225	740	NO
DE	Knittlingen-Kleinvillars	Ölbronn-Dürrn	1.2	Electrified	1435	100	225	740	NO
DE	Ölbronn-Dürrn	Maulbronn West	3.3	Electrified	1435	100	225	740	NO
DE	Maulbronn West	Ötisheim	3.1	Electrified	1435	160	225	740	NO
DE	Ötisheim	Mühlacker	2.9	Electrified	1435	160	225	740	NO
SPACER_DE									
DE	Mühlacker	Mühlacker Rößlesweg	1.2	Electrified	1435	160	225	740	NO
DE	Mühlacker Rößlesweg	Illingen (Württ)	4.4	Electrified	1435	160	225	740	NO
DE	Illingen (Württ)	Illingen Streckenwechsel 4842/4800	0.8	Electrified	1435	160	225	740	NO
DE	Illingen Streckenwechsel 4842/4800	Vaihingen (Enz)	2.6	Electrified	1435	160	225	740	NO
DE	Vaihingen (Enz)	Sersheim Aischbach	3.9	Electrified	1435	160	225	740	NO
DE	Sersheim Aischbach	Sersheim Streckenwechsel 4800/4842	0.6	Electrified	1435	160	225	740	NO
DE	Sersheim Streckenwechsel 4800/4842	Sersheim	0.5	Electrified	1435	160	225	740	NO
DE	Sersheim	Sachsenheim	3.4	Electrified	1435	160	225	740	NO
DE	Sachsenheim	Bietigheim-Bissingen Ellental	4.7	Electrified	1435	160	225	740	NO
DE	Bietigheim-Bissingen Ellental	Bietigheim-Bissingen	1.9	Electrified	1435	160	225	740	NO
DE	Bietigheim-Bissingen	Tamm (Württ)	3.4	Electrified	1435	120	225	740	NO
DE	Tamm (Württ)	Asperg	2.6	Electrified	1435	120	225	740	NO

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
DE	Asperg	Ludwigsburg	3.6	Electrified	1435	120	225	740	NO
DE	Ludwigsburg	Kornwestheim Karlshöhe	1.8	Electrified	1435	160	225	740	NO
DE	Kornwestheim Karlshöhe	Kornwestheim Pbf	1.8	Electrified	1435	160	225	740	NO
DE	Kornwestheim Pbf	Stuttgart-Zuffenhausen	3.9	Electrified	1435	160	225	740	NO
SPACER_DE									
DE	Stuttgart-Zuffenhausen	Stuttgart-Zazenhausen Hp	1	Electrified	1435	100	225	740	NO
DE	Stuttgart-Zazenhausen Hp	Stuttgart-Münster	2.5	Electrified	1435	100	225	740	NO
DE	Stuttgart-Münster	Stuttgart Ebitzweg	2.2	Electrified	1435	100	225	740	NO
DE	Stuttgart Ebitzweg	Stuttgart-Untertürkheim	2.2	Electrified	1435	100	225	740	NO
DE	Stuttgart-Untertürkheim	Stuttgart-Obertürkheim	2.4	Electrified	1435	160	225	740	NO
DE	Stuttgart-Obertürkheim	Esslingen-Mettingen	1.8	Electrified	1435	160	225	740	NO
DE	Esslingen-Mettingen	Esslingen (Neckar)	2.1	Electrified	1435	160	225	740	NO
DE	Esslingen (Neckar)	Oberesslingen	2.2	Electrified	1435	160	225	740	NO
DE	Oberesslingen	Esslingen-Zell	2.5	Electrified	1435	160	225	740	NO
DE	Esslingen-Zell	Altbach	1.8	Electrified	1435	160	225	740	NO
DE	Altbach	Plochingen	2.5	Electrified	1435	160	225	740	NO
DE	Plochingen	Reichenbach (Fils)	4.4	Electrified	1435	160	225	740	NO
DE	Reichenbach (Fils)	Ebersbach (Fils)	4.7	Electrified	1435	160	225	740	NO
DE	Ebersbach (Fils)	Uhingen	4.7	Electrified	1435	160	225	740	NO

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
DE	Uhingen	Faurndau	2.4	Electrified	1435	160	225	740	NO
DE	Faurndau	Göppingen	3.1	Electrified	1435	160	225	740	NO
DE	Göppingen	Eislingen (Fils)	4	Electrified	1435	160	225	740	NO
DE	Eislingen (Fils)	Salach	2.5	Electrified	1435	160	225	740	NO
DE	Salach	Süßen	1.8	Electrified	1435	160	225	740	NO
DE	Süßen	Gingen (Fils)	3.3	Electrified	1435	160	225	740	NO
DE	Gingen (Fils)	Kuchen	2.6	Electrified	1435	160	225	740	NO
DE	Kuchen	Geislingen West	1.7	Electrified	1435	160	225	740	NO
DE	Geislingen West	Geislingen (Steige)	3.3	Electrified	1435	100	225	740	NO
DE	Geislingen (Steige)	Amstetten (Württ)	5.7	Electrified	1435	120	225	740	NO
DE	Amstetten (Württ)	Urspring	3.9	Electrified	1435	120	225	740	NO
DE	Urspring	Lonsee	1.9	Electrified	1435	120	225	740	NO
DE	Lonsee	Westerstetten	3.1	Electrified	1435	120	225	740	NO
DE	Westerstetten	Beimerstetten	6	Electrified	1435	160	225	740	NO
DE	Beimerstetten	Ulm Hbf	12	Electrified	1435	160	225	740	NO
SPACER_DE									
DE	Karlsruhe Durlach	Weingarten (Baden)	7.8	Electrified	1435	160	225	740	NO
DE	Weingarten (Baden)	Untergrombach	3.7	Electrified	1435	160	225	740	NO
DE	Untergrombach	Bruchsal Bildungszentrum	3.2	Electrified	1435	160	225	740	NO

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
DE	Bruchsal Bildungszentrum	Bruchsal	1.9	Electrified	1435	160	225	740	NO
DE	Bruchsal	Bruchsal Nord	2	Electrified	1435	160	225	740	NO
DE	Bruchsal Nord	Bruchsal Rollenberg	2	Electrified	1435	100	225	740	NO
DE	Waghäusel Saalbach	Bruchsal Rollenberg	13.7	Electrified	1435	280	225	740	NO
DE	Bruchsal Rollenberg	Kraichtal	10.1	Electrified	1435	280	225	740	NO
DE	Kraichtal	Vaihingen (Enz)	23	Electrified	1435	280	225	740	NO
DE	Vaihingen (Enz)	Stuttgart-Zuffenhausen	20.8	Electrified	1435	280	225	740	NO
DE	Stuttgart-Zuffenhausen	Stuttgart-Feuerbach	1.9	Electrified	1435	120	225	740	NO
DE	Stuttgart-Feuerbach	Stuttgart Pragtunnel	1.2	Electrified	1435	100	225	740	NO
DE	Stuttgart Pragtunnel	Stuttgart Hbf	3.4	Electrified	1435	100	225	740	NO
DE	Stuttgart Hbf	Ulm Hbf	59.6	Electrified	1435	250	225	740	NO
DE	Ulm Hbf	Neu-Ulm	1.9	Electrified	1435	120	225	740	NO
DE	Neu-Ulm	Burlafingen	5.2	Electrified	1435	160	225	740	NO
DE	Burlafingen	Nersingen	4.2	Electrified	1435	160	225	740	NO
DE	Nersingen	Unterfahlheim	3.2	Electrified	1435	160	225	740	NO
DE	Unterfahlheim	Leipheim	4.4	Electrified	1435	160	225	740	NO
DE	Leipheim	Günzburg	5.1	Electrified	1435	160	225	740	NO
DE	Günzburg	Neuoffingen	5.5	Electrified	1435	160	225	740	NO
DE	Neuoffingen	Offingen	2.7	Electrified	1435	160	225	740	NO

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
DE	Offingen	Mindelaltheim	3.7	Electrified	1435	160	225	740	NO
DE	Mindelaltheim	Burgau (Schwab)	3.8	Electrified	1435	160	225	740	NO
DE	Burgau (Schwab)	Jettingen	3.3	Electrified	1435	160	225	740	NO
DE	Jettingen	Freihalden	4.7	Electrified	1435	160	225	740	NO
DE	Freihalden	Dinkelscherben	9.9	Electrified	1435	160	225	740	NO
DE	Dinkelscherben	Kutzenhausen	8.4	Electrified	1435	200	225	740	NO
DE	Kutzenhausen	Gessertshausen	2.7	Electrified	1435	200	225	740	NO
DE	Gessertshausen	Diedorf (Schwab)	4.2	Electrified	1435	200	225	740	NO
DE	Diedorf (Schwab)	Westheim (Schwab)	4.5	Electrified	1435	200	225	740	NO
DE	Westheim (Schwab)	Neusäß	1.5	Electrified	1435	160	225	740	NO
DE	Neusäß	Augsburg-Oberhausen	4.3	Electrified	1435	160	225	740	NO
DE	Augsburg-Oberhausen	Augsburg Hbf	2	Electrified	1435	160	225	740	NO
DE	Augsburg Hbf	Augsburg Haunstetterstraße	1.6	Electrified	1435	160	225	740	NO
DE	Augsburg Haunstetterstraße	Augsburg-Hochzoll Abzweig	2.8	Electrified	1435	160	225	740	NO
DE	Augsburg-Hochzoll Abzweig	Mering Üst	12.2	Electrified	1435	250	225	740	NO
DE	Mering Üst	Olching	26.2	Electrified	1435	250	225	740	NO
DE	Olching	München-Lochhausen	6.8	Electrified	1435	200	225	740	NO
DE	München-Lochhausen	München-Pasing	4.9	Electrified	1435	160	225	740	NO
DE	München-Pasing	München Landsberger Straße	3.2	Electrified	1435	160	225	740	NO

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
DE	München Landsberger Straße	München Hbf	4.1	Electrified	1435	160	225	740	NO
DE	München Hbf	München Heimeranplatz	3.4	Electrified	1435	100	225	740	NO
DE	München Heimeranplatz	München Süd	2	Electrified	1435	120	225	740	NO
DE	München Süd	München Ost Pbf	4.3	Electrified	1435	120	225	740	NO
DE	München Ost Pbf	München-Berg am Laim	2.4	Electrified	1435	120	225	740	NO
DE	München-Berg am Laim	München-Riem	3.8	Electrified	1435	120	225	740	NO
DE	München-Riem	Feldkirchen (b München)	4	Electrified	1435	160	225	740	NO
DE	Feldkirchen (b München)	Heimstetten	2.3	Electrified	1435	160	225	740	NO
DE	Heimstetten	Grub (Oberbay)	1.8	Electrified	1435	160	225	740	NO
DE	Grub (Oberbay)	Poing	2	Electrified	1435	160	225	740	NO
DE	Poing	Markt Schwaben	4.8	Electrified	1435	160	225	740	NO
DE	Markt Schwaben	Hörlkofen	8.2	Diesel	1435	160	225	740	NO
DE	Hörlkofen	Walpertskirchen	3	Diesel	1435	160	225	740	NO
DE	Walpertskirchen	Thann-Matzbach	6.3	Diesel	1435	160	225	740	NO
DE	Thann-Matzbach	Dorfen Bahnhof	8.6	Diesel	1435	160	225	740	NO
DE	Dorfen Bahnhof	Schwindegg	6.9	Diesel	1435	120	225	740	NO
DE	Schwindegg	Weidenbach	7.8	Diesel	1435	120	225	740	NO
DE	Weidenbach	Ampfing	5	Diesel	1435	160	225	740	NO
DE	Ampfing	Mühldorf (Oberbay)	8.1	Diesel	1435	160	225	740	NO

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
DE	Mühldorf (Oberbay)	Tüßling	6.8	Diesel	1435	120	225	740	NO
DE	Tüßling	Garching (Alz)	9.4	Diesel	1435	120	225	740	NO
DE	Garching (Alz)	Kirchweidach	7.8	Diesel	1435	120	200	740	NO
DE	Kirchweidach	Tittmoning-Wiesmühl	11.6	Diesel	1435	120	200	740	NO
DE	Tittmoning-Wiesmühl	Fridolfing	6.1	Diesel	1435	120	200	740	NO
DE	Fridolfing	Kirchanschöring	4.2	Diesel	1435	120	200	740	NO
DE	Kirchanschöring	Laufen (Oberbay)	7.5	Diesel	1435	120	200	740	NO
DE	Laufen (Oberbay)	Freilassing	12.0	Diesel	1435	120	200	740	NO
DE	Freilassing	Salzburg Grenze	1.0	Electrified	1435	120	225	740	NO
SPACER_DE									
AT	Bundesgrenze D/A /Freilassing (Border A/D)	Salzburg	5.5	Electrified	1435	120	225	650	NO
AT	Salzburg	Wels	100.2	Electrified	1435	200	225	650	NO
SPACER_AT									
DE	Bruchsal Nord	Ubstadt-Weiher (Abzw)	3.0	Electrified	1435	160	225	740	NO
DE	Ubstadt-Weiher (Abzw)	Ubstadt-Weiher	0.4	Electrified	1435	160	225	740	NO
DE	Ubstadt-Weiher	Bad Schönborn Süd	3.9	Electrified	1435	160	225	740	NO
DE	Bad Schönborn Süd	Bad Schönborn Kronau	2.2	Electrified	1435	160	225	740	NO
DE	Bad Schönborn Kronau	Rot-Malsch	2.7	Electrified	1435	160	225	740	NO

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
DE	Rot-Malsch	Wiesloch Heidelberger Druckmaschinen AG	4.9	Electrified	1435	160	225	740	NO
DE	Wiesloch Heidelberger Druckmaschinen AG	Wiesloch-Walldorf	0.5	Electrified	1435	160	225	740	NO
DE	Wiesloch-Walldorf	St Ilgen-Sandhausen	5.6	Electrified	1435	160	225	740	NO
DE	St Ilgen-Sandhausen	Heidelberg-Kirchheim/Rohrbach	4.3	Electrified	1435	160	225	740	NO
DE	Heidelberg-Kirchheim/Rohrbach	Heidelberg Hbf	3	Electrified	1435	160	225	740	NO
DE	Heidelberg Hbf	Heidelberg-Pfaffengrund/Wieblingen	2.7	Electrified	1435	160	225	740	NO
DE	Heidelberg-Pfaffengrund/Wieblingen	Heidelberg-Wieblingen	0.4	Electrified	1435	160	225	740	NO
SPACER_DE									
DE	Heidelberg-Wieblingen	Mannheim-Friedrichsfeld Süd Hp	5.4	Electrified	1435	160	225	740	NO
DE	Mannheim-Friedrichsfeld Süd Hp	Mannheim-Friedrichsfeld Südeinf/Ausf	0.5	Electrified	1435	160	225	740	NO
DE	Mannheim-Friedrichsfeld Südeinf/Ausf	Mannheim-Seckenheim	2.3	Electrified	1435	160	225	740	NO
DE	Mannheim-Seckenheim	Mannheim-SAP-Arena/Maimarkt	1.9	Electrified	1435	160	225	740	NO
DE	Mannheim-SAP-Arena/Maimarkt	Mannheim Hbf	4	Electrified	1435	160	225	740	NO
SPACER_DE									
DE	Heidelberg-Wieblingen	Mannheim-Friedrichsfeld	6.6	Electrified	1435	160	225	740	NO
SPACER_DE									
DE	Mannheim-Friedrichsfeld Süd Hp	Mannheim-Friedrichsfeld Südeinf/Ausf	0.5	Electrified	1435	160	225	740	NO

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
DE	Mannheim-Friedrichsfeld Südeinf/Ausf	Mannheim-Friedrichsfeld	1.5	Electrified	1435	100	225	740	NO
SPACER_DE									
DE	Mannheim-Friedrichsfeld	Ladenburg	3.2	Electrified	1435	160	225	740	NO
DE	Ladenburg	Heddesheim/Hirschberg	4.7	Electrified	1435	160	225	740	NO
DE	Heddesheim/Hirschberg	Lützelsachsen	2.2	Electrified	1435	160	225	740	NO
DE	Lützelsachsen	Weinheim (Bergstr)	3.2	Electrified	1435	160	225	740	NO
DE	Weinheim (Bergstr)	Hemsbach	4.3	Electrified	1435	160	225	740	NO
DE	Hemsbach	Laudenbach (Bergstr)	2.4	Electrified	1435	160	225	740	NO
DE	Laudenbach (Bergstr)	Heppenheim (Bergstr)	3.4	Electrified	1435	160	225	740	NO
DE	Heppenheim (Bergstr)	Bensheim	4.6	Electrified	1435	160	225	740	NO
DE	Bensheim	Bernsheim-Auerbach	2.3	Electrified	1435	160	225	740	NO
DE	Bernsheim-Auerbach	Zwingenberg (Bergstr)	2.6	Electrified	1435	160	225	740	NO
DE	Zwingenberg (Bergstr)	Hähnlein-Alsbach	1.6	Electrified	1435	160	225	740	NO
DE	Hähnlein-Alsbach	Bickenbach (Bergstr)	2.2	Electrified	1435	160	225	740	NO
DE	Bickenbach (Bergstr)	Darmstadt-Eberstadt	6.3	Electrified	1435	160	225	740	NO
DE	Darmstadt-Eberstadt	Darmstadt Süd	4.6	Electrified	1435	160	225	740	NO
DE	Darmstadt Süd	Darmstadt Hbf	2.1	Electrified	1435	160	225	740	NO
DE	Darmstadt Hbf	Darmstadt-Arheiligen	4.9	Electrified	1435	160	225	740	NO
DE	Darmstadt-Arheiligen	Erzhausen	4.2	Electrified	1435	160	225	740	NO

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
DE	Erzhausen	Langen (Hess)	4.8	Electrified	1435	160	225	740	NO
DE	Langen (Hess)	Dreieich-Buchschlag	3.1	Electrified	1435	160	225	740	NO
DE	Dreieich-Buchschlag	Neu-Isenburg	3.5	Electrified	1435	160	225	740	NO
DE	Neu-Isenburg	Frankfurt-Louisa	3.5	Electrified	1435	160	225	740	NO
SPACER_DE									
DE	Karlsruhe Hbf	Karlsruhe-Hagsfeld	5.5	Electrified	1435	200	225	740	NO
DE	Karlsruhe-Hagsfeld	Blankenloch	4.7	Electrified	1435	200	225	740	NO
DE	Blankenloch	Friedrichstal (Baden)	4.9	Electrified	1435	200	225	740	NO
DE	Friedrichstal (Baden)	Graben-Neudorf	5.9	Electrified	1435	200	225	740	NO
DE	Graben-Neudorf	Philippsburg Molzau	4.9	Electrified	1435	200	225	740	NO
DE	Philippsburg Molzau	Waghäusel Saalbach	2.1	Electrified	1435	200	225	740	NO
DE	Waghäusel Saalbach	Hockenheim	10.9	Electrified	1435	280	225	740	NO
DE	Hockenheim	Mannheim Hbf	20.9	Electrified	1435	280	225	740	NO
DE	Mannheim Hbf	Mannheim-Handelshafen	2.1	Electrified	1435	120	225	740	NO
DE	Mannheim-Handelshafen	Mannheim-Neckarstedt	1.4	Electrified	1435	160	225	740	NO
DE	Mannheim-Neckarstedt	Mannheim-Luzenberg	2	Electrified	1435	160	225	740	NO
DE	Mannheim-Luzenberg	Mannheim-Waldhof	1	Electrified	1435	160	225	740	NO
DE	Mannheim-Waldhof	Lampertheim	8.1	Electrified	1435	200	225	740	NO
DE	Lampertheim	Bürstadt (Hp)	5.4	Electrified	1435	200	225	740	NO

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
DE	Bürstadt (Hp)	Bobstadt	2.1	Electrified	1435	200	225	740	NO
DE	Bobstadt	Biblis	3.1	Electrified	1435	160	225	740	NO
DE	Biblis	Groß Rohrheim	3.4	Electrified	1435	200	225	740	NO
DE	Groß Rohrheim	Gernsheim	4.8	Electrified	1435	200	225	740	NO
DE	Gernsheim	Biebesheim	3.2	Electrified	1435	200	225	740	NO
DE	Biebesheim	Stockstadt (Rhein)	3.1	Electrified	1435	200	225	740	NO
DE	Stockstadt (Rhein)	Riestadt-Goddelau	3	Electrified	1435	200	225	740	NO
DE	Riestadt-Goddelau	Riedstadt-Wolfskehlen	2.3	Electrified	1435	200	225	740	NO
DE	Riedstadt-Wolfskehlen	Groß-Gerau-Dornheim	2.6	Electrified	1435	200	225	740	NO
DE	Groß-Gerau-Dornheim	Groß-Gerau-Dornberg	3.9	Electrified	1435	200	225	740	NO
DE	Groß-Gerau-Dornberg	Mörfelden	9.1	Electrified	1435	200	225	740	NO
DE	Mörfelden	Walldorf (Hess)	2.7	Electrified	1435	200	225	740	NO
DE	Walldorf (Hess)	Zeppelinheim	4.3	Electrified	1435	200	225	740	NO
DE	Zeppelinheim	Frankfurt am Main Stadion	4.2	Electrified	1435	160	225	740	NO
DE	Frankfurt am Main Stadion	Forsthaus (Frankfurt)	1.8	Electrified	1435	120	225	740	NO
DE	Forsthaus (Frankfurt)	Frankfurt (Main) Süd	3.8	Electrified	1435	120	225	740	NO
SPACER_DE									
DE	Frankfurt (Main) Süd	Offenbach (Main) Hbf	5.7	Electrified	1435	160	225	740	NO
DE	Offenbach (Main) Hbf	Offenbach (Main) Ost	1.5	Electrified	1435	160	225	740	NO

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
DE	Offenbach (Main) Ost	Mühlheim (Main)	4.5	Electrified	1435	160	225	740	NO
DE	Mühlheim (Main)	Hanau Hbf	6.9	Electrified	1435	160	225	740	NO
DE	Hanau Hbf	Großauheim (Kr Hanau)	1.9	Electrified	1435	120	225	740	NO
DE	Großauheim (Kr Hanau)	Großkrotzenburg	3.5	Electrified	1435	160	225	740	NO
DE	Großkrotzenburg	Kahl (Main)	2.1	Electrified	1435	160	225	740	NO
DE	Kahl (Main)	Dettingen (Main)	4.4	Electrified	1435	160	225	740	NO
DE	Dettingen (Main)	Rückersbacher Schlucht	2.9	Electrified	1435	160	225	740	NO
DE	Rückersbacher Schlucht	Kleinostheim	2.2	Electrified	1435	160	225	740	NO
DE	Kleinostheim	Mainaschaff Steinerts	1.9	Electrified	1435	160	225	740	NO
DE	Mainaschaff Steinerts	Aschaffenburg Hbf	4.3	Electrified	1435	160	225	740	NO
DE	Aschaffenburg Hbf	Hösbach	6.7	Electrified	1435	160	225	740	NO
DE	Hösbach	Laufach	3.9	Electrified	1435	160	225	740	NO
DE	Laufach	Heigenbrücken	6.9	Electrified	1435	120	225	740	NO
DE	Heigenbrücken	Wiesthal	6.5	Electrified	1435	160	225	740	NO
DE	Wiesthal	Partenstein	7.6	Electrified	1435	120	225	740	NO
DE	Partenstein	Lohr Bahnhof	6.4	Electrified	1435	160	225	740	NO
DE	Lohr Bahnhof	Nantenbach	4.7	Electrified	1435	160	225	740	NO
DE	Nantenbach	Rohrbach	10.7	Electrified	1435	200	225	740	NO
DE	Rohrbach	Würzburg Hbf	24.9	Electrified	1435	280	225	740	NO

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
DE	Würzburg Hbf	Rottendorf	8	Electrified	1435	160	225	740	NO
DE	Rottendorf	Dettelbach Bahnhof	6.1	Electrified	1435	160	225	740	NO
DE	Dettelbach Bahnhof	Buchbrunn-Mainstockheim	5.2	Electrified	1435	160	225	740	NO
DE	Buchbrunn-Mainstockheim	Kitzingen	3.7	Electrified	1435	160	225	740	NO
DE	Kitzingen	Mainbernheim	5.4	Electrified	1435	160	225	740	NO
DE	Mainbernheim	Iphofen	4.1	Electrified	1435	160	225	740	NO
DE	Iphofen	Markt Einersheim	2.4	Electrified	1435	200	225	740	NO
DE	Markt Einersheim	Markt Bibart	11.6	Electrified	1435	200	225	740	NO
DE	Markt Bibart	Langenfeld (Mittelfr)	7	Electrified	1435	200	225	740	NO
DE	Langenfeld (Mittelfr)	Neustadt (Aisch) Bahnhof	7.7	Electrified	1435	200	225	740	NO
DE	Neustadt (Aisch) Bahnhof	Neustadt (Aisch) Mitte	1.7	Electrified	1435	160	225	740	NO
DE	Neustadt (Aisch) Mitte	Emskirchen	7.9	Electrified	1435	160	225	740	NO
DE	Emskirchen	Hagenbüchach Hp (Plang)	4.6	Electrified	1435	160	225	740	NO
DE	Hagenbüchach Hp (Plang)	Hagenbüchach	0.5	Electrified	1435	160	225	740	NO
DE	Hagenbüchach	Puschendorf	5.4	Electrified	1435	160	225	740	NO
DE	Puschendorf	Siegelsdorf	3.8	Electrified	1435	160	225	740	NO
DE	Siegelsdorf	Fürth-Burgfarrnbach	3.9	Electrified	1435	160	225	740	NO
DE	Fürth-Burgfarrnbach	Fürth-Unterfürberg	3.1	Electrified	1435	160	225	740	NO
DE	Fürth-Unterfürberg	Fürth (Bay) Hbf	2.5	Electrified	1435	160	225	740	NO

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
DE	Fürth (Bay) Hbf	Fürth (Bay) Gbf	1	Electrified	1435	160	225	740	NO
DE	Fürth (Bay) Gbf	Nürnberg Jansenbrücke	2.9	Electrified	1435	160	225	740	NO
DE	Nürnberg Jansenbrücke	Nürnberg Hbf	3.8	Electrified	1435	160	225	740	NO
DE	Nürnberg Hbf	Nürnberg-Dutzendteich	3.7	Electrified	1435	160	225	740	NO
DE	Nürnberg-Dutzendteich	Nürnberg Reichswald	5.7	Electrified	1435	200	225	740	NO
DE	Nürnberg Reichswald	Feucht	3	Electrified	1435	200	225	740	NO
DE	Feucht	Feucht Ost	1.3	Electrified	1435	160	225	740	NO
DE	Feucht Ost	Ochenbruck	2.8	Electrified	1435	160	225	740	NO
DE	Ochenbruck	Mimberg	2	Electrified	1435	120	225	740	NO
DE	Mimberg	Burgthann	3	Electrified	1435	120	225	740	NO
DE	Burgthann	Oberferrieden	2.3	Electrified	1435	120	225	740	NO
DE	Oberferrieden	Postbauer-Heng	3.2	Electrified	1435	120	225	740	NO
DE	Postbauer-Heng	Pölling	5.5	Electrified	1435	160	225	740	NO
DE	Pölling	Neumarkt (Oberpf)	3.6	Electrified	1435	160	225	740	NO
DE	Neumarkt (Oberpf)	Deining (Oberpf)	10.4	Electrified	1435	160	225	740	NO
DE	Deining (Oberpf)	Batzhausen	6.2	Electrified	1435	160	225	740	NO
DE	Batzhausen	Seubersdorf	3.8	Electrified	1435	160	225	740	NO
DE	Seubersdorf	Parsberg	7.3	Electrified	1435	160	225	740	NO
DE	Parsberg	Mausheim	6	Electrified	1435	160	225	740	NO

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
DE	Mausheim	Beratzhausen	4.5	Electrified	1435	160	225	740	NO
DE	Beratzhausen	Laaber	6.7	Electrified	1435	120	225	740	NO
DE	Laaber	Deuerling	4.5	Electrified	1435	120	225	740	NO
DE	Deuerling	Undorf	2.4	Electrified	1435	120	225	740	NO
DE	Undorf	Etterzhausen	3	Electrified	1435	120	225	740	NO
DE	Etterzhausen	Regensburg-Prüfening (NRH)	5.9	Electrified	1435	120	225	740	NO
DE	Regensburg-Prüfening (NRH)	Regensburg Hbf	3.7	Electrified	1435	120	225	740	NO
DE	Regensburg Hbf	Regensburg Ost	2.9	Electrified	1435	160	225	740	NO
DE	Regensburg Ost	Regensburg-Burgweinting Hp	1.8	Electrified	1435	160	225	740	NO
DE	Regensburg-Burgweinting Hp	Obertraubling	3.1	Electrified	1435	160	225	740	NO
DE	Obertraubling	Mangolding	4.2	Electrified	1435	160	225	740	NO
DE	Mangolding	Sünching	12.6	Electrified	1435	160	225	740	NO
DE	Sünching	Radldorf (Niederbay)	6.6	Electrified	1435	160	225	740	NO
DE	Radldorf (Niederbay)	Straubing	9.6	Electrified	1435	160	225	740	NO
DE	Straubing	Straßkirchen	12	Electrified	1435	160	225	740	NO
DE	Straßkirchen	Plattling	12.4	Electrified	1435	160	225	740	NO
DE	Plattling	Osterhofen (Niederbay)	15.4	Electrified	1435	160	225	740	NO
DE	Osterhofen (Niederbay)	Girching	6.2	Electrified	1435	160	225	740	NO
DE	Girching	Pleinting	2.5	Electrified	1435	160	225	740	NO

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
DE	Pleinting	Vilshofen (Niederbay)	6.9	Electrified	1435	160	225	740	NO
DE	Vilshofen (Niederbay)	Sandbach (Niederbay)	6.3	Electrified	1435	160	225	740	NO
DE	Sandbach (Niederbay)	Schalding	8	Electrified	1435	120	225	740	NO
DE	Schalding	Passau Gbf	5.4	Electrified	1435	120	225	740	NO
DE	Passau Gbf	Passau Hbf	1.7	Electrified	1435	100	225	740	NO
DE	Passau Hbf	Passau Grenze	1.6	Electrified	1435	120	225	740	NO
SPACER_AT									
AT	Passau (Border D/A)	Neumarkt-Kalham	51.2	Electrified	1435	160	225	650	YES
AT	Neumarkt-Kalham	Wels	29.7	Electrified	1435	160	225	650	YES
SPACER_AT									
AT	Wels	Linz	24.5	Electrified	1435	200	225	650	NO
AT	Linz	Linz Ebelsberg	9	Electrified	1435	230	225	740	NO
AT	Linz Ebelsberg	Amstetten	53.35	Electrified	1435	230	225	740	NO
AT	Amstetten	Sarling	19.29	Electrified	1435	230	225	740	NO
AT	Sarling	Groß Sierning	28.18	Electrified	1435	230	225	740	NO
AT	Groß Sierning	St. Poelten	13.5	Electrified	1435	230	225	740	NO
AT	St. Poelten	St. Poelten (East)	4.4	Electrified	1435	250	225	740	YES
AT	St. Poelten (East)	Bahnhof Tullnerfeld	26.34	Electrified	1435	250	225	740	YES
AT	Bahnhof Tullnerfeld	Wien Hadersdorf	20.7	Electrified	1435	250	225	740	YES

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
AT	Wien Hadersdorf*	Wien Meidling*	9	Electrified	1435	160	225	650	NO
SPACER_AT									
AT	Wien Meidling	Wien Suedbahnhof	3.32	Electrified	1435	100	225	650	NO
AT	Wien Suedbahnhof	Wien ZVB Nord	5.79	Electrified	1435	100	225	650	NO
AT	Wien ZVB Nord	Kledering	1.45	Electrified	1435	100	225	650	NO
SPACER_AT									
AT	Wien Meidling	Wien Inzersdorf	6.18	Electrified	1435	100	225	650	NO
AT	Wien Inzersdorf	Kledering	5.99	Electrified	1435	100	225	650	NO
SPACER_AT									
AT	Kledering	Gramatneusiedl	12.2	Electrified	1435	140	225	650	YES
AT	Gramatneusiedl	Goetzendorf	7.4	Electrified	1435	140	225	650	YES
AT	Goetzendorf	Parndorf	29.0	Electrified	1435	140	225	650	YES
SPACER_AT									
AT	Parndorf	Kittsee	19.9	Electrified	1435	160	225	650	NO
AT	Kittsee	Petrzalka	5.0	Electrified	1435	160	225	650	NO
SPACER_AT									
SK	Petrzalka	Rajka	15.0	Electrified	1435	80	225	650	NO
SPACER_SK									
SK	Bratislava	Petrzalka	17.0	Electrified	1435	80	225	645	NO

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
SPACER_SK									
HU	Rajka	Hegyeshalom	13.8	Electrified	1435	100	210	650	NO
SPACER_HU									
AT	Parndorf	Nickelsdorf	17.4	Electrified	1435	140	225	650	YES
SPACER_AT									
HU	Nickelsdorf	Hegyeshalom	4.2	Electrified	1435	140	225	750	YES
HU	Hegyeshalom	Gyor	47	Electrified	1435	100	225	750	YES
HU	Gyor	Komarom	37.5	Electrified	1435	160	225	750	YES
HU	Komarom	Tatabanya	29.8	Electrified	1435	160	225	750	YES
HU	Tatabanya	Budapest Kelenfold	57.5	Electrified	1435	120	225	750	YES
HU	Budapest Kelenfold	Budapest Ferencvaros	6.1	Electrified	1435	80	210	750	NO
HU	Budapest Ferencvaros	Cegled	61.2	Electrified	1435	120	210	750	NO
HU	Cegled	Szolnok	27.3	Electrified	1435	120	225	750	NO
HU	Szolnok	Szajol	11.5	Electrified	1435	120	210	750	NO
HU	Szajol	Mezotur	27.1	Electrified	1435	120	225	750	NO
HU	Mezotur	Gyoma	16.1	Electrified	1435	120	225	750	NO
HU	Gyoma	Bekescsaba	38.57	Electrified	1435	120	210	750	NO
HU	Bekescsaba	Lokoshaza	34.6	Electrified	1435	100	210	750	NO
SPACER_HU									

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
RO	Border (Curtici RO/HU)	Curtici	8.4	Electrified	1435	70	200	750	NO
RO	Curtici	Arad	17.01	Electrified	1435	70	200	720	NO
SPACER_RO									
RO	Arad	Simeria	157.36	Electrified	1435	100	200	720	NO
RO	Simeria	Coslariu	69.27	Electrified	1435	100	200	675	NO
RO	Coslariu	Sighişoara	98.4	Electrified	1435	100	200	600	NO
RO	Sighişoara	Braşov	128.61	Electrified	1435	100	200	600	NO
RO	Braşov	Predeal	26.2	Electrified	1435	100	200	650	NO
RO	Predeal	Brazi	92.17	Electrified	1435	120	220	640	NO
RO	Brazi	Bucureşti	51.4	Electrified	1435	140	220	720	NO
RO	Bucureşti	Feteşti	146.56	Electrified	1435	140	220	720	NO
RO	Feteşti	Constanţa	78.4	Electrified	1435	140	220	720	NO
SPACER_RO									
RO	Arad	Timişoara	57.3	Electrified	1435	100	200	720	NO
RO	Timişoara	Orşova	186.53	Electrified	1435	120	200	720	NO
RO	Orşova	Filiaşi	101.9	Electrified	1435	120	200	720	NO
RO	Filiaşi	Craiova	35.9	Electrified	1435	120	200	750	NO
SPACER_RO									
RO	Craiova	Caracal	94.56	Electrified	1435	120	200	750	NO

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
RO	Caracal	Roșiori	55.4	Electrified	1435	100	200	750	NO
RO	Roșiori	Videle	49.2	Electrified	1435	120	200	750	NO
RO	Videle	Bucuresti	50.86	Electrified	1435	100	200	750	NO

CS Branch – Insufficient Sections

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
DE	Nürnberg Hbf	Nürnberg Ost	3.9	Diesel	1435	100	225	740	NO
DE	Nürnberg Ost	Nürnberg-Erlenstegen	1.5	Diesel	1435	120	225	740	NO
DE	Nürnberg-Erlenstegen	Behringersdorf	4.5	Diesel	1435	160	225	740	NO
DE	Behringersdorf	Rückersdorf (Mittelfr)	2.8	Diesel	1435	160	225	740	NO
DE	Rückersdorf (Mittelfr)	Ludwigshöhe	1.5	Diesel	1435	160	225	740	NO
DE	Ludwigshöhe	Lauf (rechts Pegnitz)	2.6	Diesel	1435	160	225	740	NO
DE	Lauf (rechts Pegnitz)	Neunkirchen a Sand	3.4	Diesel	1435	160	225	740	NO
DE	Neunkirchen a Sand	Reichenschwand	3.9	Diesel	1435	160	225	740	NO
DE	Reichenschwand	Hersbruck (rechts Pegnitz)	3.7	Diesel	1435	160	225	740	NO
DE	Hersbruck (rechts Pegnitz)	Hohenstadt (Mittelfr)	5.7	Diesel	1435	120	225	740	NO
DE	Hohenstadt (Mittelfr)	Vorra (Pegnitz)	6.4	Diesel	1435	120	225	740	NO
DE	Vorra (Pegnitz)	Rupprechtstegen	4.6	Diesel	1435	120	225	740	NO
DE	Rupprechtstegen	Velden (b Hersbruck)	3.2	Diesel	1435	120	225	740	NO
DE	Velden (b Hersbruck)	Neuhaus (Pegnitz)	3.1	Diesel	1435	120	225	740	NO
DE	Neuhaus (Pegnitz)	Pegnitz	16.2	Diesel	1435	120	225	740	NO
DE	Pegnitz	Schnabelwaid	8.0	Diesel	1435	120	225	740	NO
DE	Schnabelwaid	Kirchenlaibach	18.7	Diesel	1435	160	225	740	NO

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
DE	Kirchenlaibach	Haidenaab-Göppmannsbühl	3.9	Diesel	1435	160	225	740	NO
DE	Haidenaab-Göppmannsbühl	Immenreuth	4.8	Diesel	1435	160	225	740	NO
DE	Immenreuth	Neusorg	10.5	Diesel	1435	160	225	740	NO
DE	Neusorg	Waldershof	8.4	Diesel	1435	160	225	740	NO
DE	Waldershof	Marktredwitz	3.0	Diesel	1435	160	225	740	NO
DE	Marktredwitz	Arzberg (Oberfr)	10.7	Diesel	1435	120	225	740	NO
DE	Arzberg (Oberfr)	Schirnding	3.4	Diesel	1435	120	225	740	NO
DE	Schirnding	Schirnding Grenze	2.3	Diesel	1435	100	225	740	NO
SPACER_DE									
CZ	Cheb st.hr. / Bundesgrenze D/CZ	Cheb	13.0	Diesel	1435	90	225	650	NO
CZ	Cheb	Plzen	106.0	Electrified	1435	125	225	610	NO
SPACER_CZ									
DE	München-Moosach	München-Fasanerie	2.5	Electrified	1435	160	225	740	NO
DE	München-Fasanerie	München-Feldmoching	2.3	Electrified	1435	160	225	740	NO
DE	München-Feldmoching	Schleißheim	4.1	Electrified	1435	160	225	740	NO
DE	Schleißheim	Oberschleißheim	1	Electrified	1435	160	225	740	NO
DE	Oberschleißheim	Unterschleißheim	1.9	Electrified	1435	160	225	740	NO
DE	Unterschleißheim	Lohhof	1.9	Electrified	1435	160	225	740	NO
DE	Lohhof	Eching	3.1	Electrified	1435	160	225	740	NO

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
DE	Eching	Neufahrn (b Freising)	3.8	Electrified	1435	160	225	740	NO
DE	Neufahrn (b Freising)	Pulling (b Freising)	5.8	Electrified	1435	160	225	740	NO
DE	Pulling (b Freising)	Freising	4.5	Electrified	1435	160	225	740	NO
DE	Freising	Marzling	4.7	Electrified	1435	160	225	740	NO
DE	Marzling	Langenbach (Oberbay)	4.9	Electrified	1435	160	225	740	NO
DE	Langenbach (Oberbay)	Moosburg	7.1	Electrified	1435	160	225	740	NO
DE	Moosburg	Bruckberg	7.6	Electrified	1435	160	225	740	NO
DE	Bruckberg	Gündlkofen	2.9	Electrified	1435	160	225	740	NO
DE	Gündlkofen	Landshut (Bay) Hbf	8	Electrified	1435	120	225	740	NO
DE	Landshut (Bay) Hbf	Ergoldsbach	19	Electrified	1435	160	225	740	NO
DE	Ergoldsbach	Neufahrn (Niederbay)	4.2	Electrified	1435	160	225	740	NO
DE	Neufahrn (Niederbay)	Eggmühl	14.2	Electrified	1435	120	225	740	NO
DE	Eggmühl	Hagelstadt	7.9	Electrified	1435	160	225	740	NO
DE	Hagelstadt	Köfering	4.2	Electrified	1435	160	225	740	NO
DE	Köfering	Obertraubling	4.9	Electrified	1435	160	225	740	NO
DE	Obertraubling	Regensburg-Burgweinting Hp	3.1	Electrified	1435	160	225	740	NO
DE	Regensburg-Burgweinting Hp	Regensburg Ost	1.8	Electrified	1435	160	225	740	NO
DE	Regensburg Ost	Regensburg Hbf	2.9	Electrified	1435	160	225	740	NO
DE	Regensburg Hafenbrücke	Regensburg Ost	1.5	Diesel	1435	100	225	740	NO

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
DE	Regensburg Hbf	Regensburg Hafenbrücke	2.7	Diesel	1435	100	225	740	NO
DE	Regensburg Hafenbrücke	Regensburg Walhallastraße	1.6	Diesel	1435	120	225	740	NO
DE	Regensburg Walhallastraße	Regensburg-Wutzlhofen	3.2	Diesel	1435	120	225	740	NO
DE	Regensburg-Wutzlhofen	Regenstauf	7.6	Diesel	1435	120	225	740	NO
DE	Regenstauf	Maxhütte-Haidhof	12.1	Diesel	1435	160	225	740	NO
DE	Maxhütte-Haidhof	Klardorf	8.9	Diesel	1435	160	225	740	NO
DE	Klardorf	Schwandorf	6.5	Diesel	1435	160	225	740	NO
DE	Schwandorf	Wackersdorf (Oberpf)	7.0	Diesel	1435	120	225	740	NO
DE	Wackersdorf (Oberpf)	Altenschwand	5.7	Diesel	1435	160	225	740	NO
DE	Altenschwand	Bodenwöhr Nord	7.4	Diesel	1435	160	225	740	NO
DE	Bodenwöhr Nord	Neubäu	9.5	Diesel	1435	160	225	740	NO
DE	Neubäu	Roding	6.8	Diesel	1435	120	225	740	NO
DE	Roding	Pösing	2.8	Diesel	1435	120	225	740	NO
DE	Pösing	Cham (Oberpf)	8.8	Diesel	1435	160	225	740	NO
DE	Cham (Oberpf)	Kothmaißling	6.8	Diesel	1435	120	225	740	NO
DE	Kothmaißling	Weiding	4.0	Diesel	1435	120	225	740	NO
DE	Weiding	Arnschwang	3.5	Diesel	1435	120	225	740	NO
DE	Arnschwang	Furth im Wald	4.9	Diesel	1435	120	225	740	NO
DE	Furth im Wald	Furth im Wald Grenze	6.7	Diesel	1435	100	225	740	NO

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
SPACER_DE									
CZ	Furth im Wald/Ceska Kubice	Domazlice	11.0	Diesel	1435	80	200	500	NO
CZ	Domazlice	Plzen	59.0	Diesel	1435	100	200	500	NO
SPACER_CZ									
CZ	Plzen	Beroun	72.0	Electrified	1435	160	225	675	NO
CZ	Beroun	Praha Vrsovice	42.0	Electrified	1435	100	225	700	NO
CZ	Praha Vrsovice	Praha Holesovice	10	Electrified	1435	100	225	700	NO
CZ	Praha Holesovice	Praha	7.8	Electrified	1435	100	225	700	NO
CZ	Praha	Lysa n. Labem	34.5	Electrified	1435	100	225	600	NO
CZ	Lysa n. Labem	Kolin	39	Electrified	1435	120	225	600	NO
CZ	Praha	Kolin	61.0	Electrified	1435	160	225	700	NO
CZ	Kolin	St. Kolin	6.3	Electrified	1435	160	225	700	NO
CZ	St. Kolin	Pardubice	34.8	Electrified	1435	160	225	700	NO
CZ	Pardubice	Chocen	35.0	Electrified	1435	160	225	700	NO
CZ	Choceň	Usti nad Orlici	15.0	Electrified	1435	160	225	700	NO
CZ	Usti nad Orlici	Ceska Trebova	11.0	Electrified	1435	160	225	700	NO
CZ	Ceska Trebova	Prerov	106.7	Electrified	1435	160	225	700	NO
CZ	Prerov	Hranice na Morave	31.4	Electrified	1435	160	225	700	NO
CZ	Hranice na Morave	Horni Lidec/Luky pod	68.4	Electrified	1435	90	225	600	NO

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
		Makytou							
SPACER_CZ									
CZ	Hranice na Morave	Ostrava hl.n.	55.1	Electrified	1435	160	225	690	NO
CZ	Ostrava hl.n.	Ostrava-Kunice	7.6	Electrified	1435	80	225	500	NO
CZ	Ostrava-Kunice	Odb Chotebuz	24.5	Electrified	1435	80	225	700	NO
CZ	Odb Chotebuz	Mosty u Jablunkova	33.8	Electrified	1435	160	225	660	NO
SPACER_CZ									
SK	Mosty u Jablunkova	Cadca	6.7	Electrified	1435	100	225	700	NO
SK	Cadca	Zilina	30.5	Electrified	1435	100	225	700	NO
SK	Horni Lidec/Luky pod Makytou	Puchov	20.0	Electrified	1435	90	225	645	NO
SK	Puchov	Zilina	43.4	Electrified	1435	100	225	650	NO
SK	Zilina	Vrutky	20.9	Electrified	1435	100	225	650	NO
SK	Vrutky	Strba	102.1	Electrified	1435	100	225	650	NO
SK	Strba	Poprad	18.9	Electrified	1435	100	225	650	NO
SK	Poprad	Margecany	66.0	Electrified	1435	120	225	650	NO
SK	Margecany	Kysak	19.0	Electrified	1435	100	225	650	NO
SK	Kysak	Kosice	15.6	Electrified	1435	100	225	650	NO
SK	Kosice	Barca (ST1)	3.8	Electrified	1435	100	225	670	NO
SK	Barca (ST1)	Cierna nad Tisou	90.9	Electrified	1435	100	225	670	NO

Sections			Length of section	Traction	Track gauge	Max. operating speed	Max. axle load	Maximum train length	ERTMS in operation
Country	From	To	[m]		[mm]	[km/h]	[kN]	[m]	YES / NO
SK	Cierna nad Tisou	Cop (UA)	4.0	Electrified	1435	50	225	670	NO
SPACER_SK									
UA	Cop (UA)	Hinterland UA		Electrified	1520				NO