

RFC Rhine-Alpine

IMPLEMENTATION PLAN Update 2023

ANNEX B: List of projects State of play 2023



December 2023
WG Infrastructure and Terminals (WG I&T)
Source: CIP, based on information of
Infrastructure Managers on RFC Rhine-
Alpine

Country	Project Category	Project Name	Benefit	Go Live Date	Description	Total budget	Decision Status	Funding Source
BE *	ERTMS	ETCS equipment Belgium **	Interoperability	2025.12	Equipment of the remaining part of the Belgian network	495.06	Realisation	Public + European
DE	ERTMS	ETCS Korridor Rhine-Alpine	Interoperability	2040.12	ERTMS equipment existing line (Oberhausen - Basel)	1,650.00	Secured	Public + European
DE	ERTMS	ETCS Realisierungszentrum West Anteil RFC North Sea - Baltic	Interoperability	2030.12	ETCS deployment on RFC North Sea-Baltic lines in DB Netz Region West. Project also covers lines of RFC Rhine-Alpine.	N/A	Secured	Public + European
DE	ERTMS	ABS POS Süd ETCS equipment	Interoperability	2028.12	ETCS deployment Appenweier - Kehl border	164	Planned	Public
DE	ERTMS	ETCS on Riedbahn	Interoperability	2025.12	LZB replacement on Riedbahn by ETCS	N/A	Planned	Public
DE	ERTMS	ETCS Realisierung Köln - Aachen/Venlo	Interoperability	2029.12	Implementation of ETCS on tracks of DB Netz between Cologne and the border to Belgium (Aachen) and The Netherlands in Kaldenkirchen/Venlo. Project also covers lines of RFC North Sea - Baltic.	N/A	Realisation	Public
IT	ERTMS	ERTMS implementation Mediterranean Corridor - first phase	Interoperability	2023.12	Implementation of ERTMS on priority sections of Mediterranean Corridor	116.00	Secured	State+EU

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 **No split per RFC if multiple RFCs are concerned

IT	ERTMS	ERTMS Completion Corridor Rhine - Alpine	Interoperability	2036.12	Step by step completion of the whole corridor ERTMS Installation.(Some Phases between 2025 and 2026)Level 2 -2036	82.00	Planned	State+EU
IT	ERTMS	ETCS Deployment Premosello - Vignale L2	Interoperability	2035.12	ETCS Premosello - Vignale L2 upgrade	N/A	Planned	State
IT	ERTMS	ETCS Deployment Iselle - Domodossola, Pino Tronzano - Luino	Interoperability	2031.12	ETCS L2 upgrade	N/A	Planned	State
IT	ERTMS	ERTMS Milano - Genova	Interoperability	2032.12	ERTMS Installation - Tortona-Bivio Fegino-Genova 2032; Terzo Valico dei Giovi 2027	22.00	Realisation	State+European
IT	ERTMS	ERTMS Chiasso-Milano Smistamento	Interoperability	2035.12	ERTMS installation (ERTMS L2)	12.00	Realisation	State+European
NL	ERTMS	ERTMS Roosendaal - Sloehaven	Interoperability	2030.12	Implementation of ETCS between Roosendaal and Sloehaven	N/A	Study / To be decided	public
NL	ERTMS	ERTMS Roosendaal - Den Bosch	Interoperability	2030.01	Implementing ERTMS between Roosendaal and 's Hertogenbosch. Go live 2028-2030.	N/A	Planned	Public + European
NL	ERTMS	ERTMS Meteren - Eindhoven	Interoperability	2031.01	Implementing ERTMS between Meteren and Eindhoven. (Go live 2029-2031)	N/A	Planned	Public + European
NL	ERTMS	ERTMS Utrecht - Meteren	Interoperability	2029.01	Implementing ERTMS between Utrecht Centraal and	N/A	Planned	Public + European

					Betuweroute Meteren. Go live 2028-2029			
NL	ERTMS	ERTMS Eindhoven - Venlo border	Interoperability	2031.01	Implementing ERTMS between Eindhoven and Venlo border. Go live in 2029-2031	N/A	Planned	Public + European
CH	ERTMS	ETCS Equipment in the node of Basel (CH)	Interoperability	2024.06	ETCS equipment on German tracks in Switzerland	15	Realisation	Public
CH	ERTMS	Vezia-Capolago Zugfolgezeitverkürzung	Capacity	2025.05	The south approach line to the CBT (Vezia–Lugano–Capolago-Riva S.Vitale) will be equipped with ETCS Level 2	N/A	Realisation	ZEB-Program
BE *	Infrastructure	Adapting several TEN-T line sections to civilian-defence dual use by improving the infrastructure for 740m trains**	Train length	2027.12	Construction of side tracks 750m at Dendermonde, Lokeren, Merelbeke, Saint Vincent, Gedinne, Stockem and Lobbes	55.42	Secured	Public
BE *	Infrastructure	Third track Brugge - Dudzele	Capacity	>2032.12	Construction of a third track between Brugge and Dudzele (L51, L51A and L51C)	2.57	Planned	Public
BE *	Infrastructure	Junction Oude Landen	Capacity	2033.12	Construction of junction at Oude Landen (L27A) to provide a better access to the port of Antwerp	52.76	Planned	Public
BE *	Infrastructure	Second track Neerpelt - Balen Werkplaatsen	Capacity	2026.12	Construction of a second track on line 19 between Neerpelt	49.78	Planned	Public + European

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					and Balen Werkplaatsen			
BE*	Infrastructure	By-pass Mechelen	Capacity	2037.12	L25: construction by-pass Mechelen	0.60	Planned	Public
BE*	Infrastructure	Second access to the Port of Antwerp	Capacity	2025.12	Study on construction of new line between Antwerp North and Lier to provide a better access to the Port of Antwerp	1.76	Realisation	Public (federal + region)
BE*	Infrastructure	Masterplan port of Zeebrugge	Capacity	2028.12	Extension and modernisation of Zeebrugge (with a new hub of 24 tracks in Zwankendamme and a fan of sidings in Zeebrugge and the removal of the level crossing in Lissewege)	5.02	Realisation	Public (federal + SPV)
BE*	Infrastructure	Third and 4th track Gent - Brugge	Capacity	2030.12	Construction of a 3rd and 4th track between Brugge and Gent (L50A)	130.08	Realisation	Public + European
BE*	Infrastructure	Level crossing removal	Capacity	2026.12	Elimination of level crossings on L59 (Lokeren, Lochristi, Beveren Waas), L35 (Rotselaar) and L15 (Lier, Herentals)	18.45	Realisation	Public + European
BE*	Infrastructure	North Sea Port development	Capacity	2025.12	Capacity increase within the Port of Ghent: Mercatordok (750m tracks), Zandeken, renovation bundles and access tracks	20.04	Realisation	Public (incl. BRP) + European (RRF)
BE*	Infrastructure	Development of the Port of Antwerp	Capacity	2027.12	Several works in the port area of Antwerp,	69.00	Realisation	Public

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					including electrification and doubling of L11, signalling works L223 and L221, extension bundle tracks Pelikaan			
BE*	Infrastructure	3rd track between Lokeren and Sint Niklaas (L59)	Capacity	2027.12	Studies and first works related to the construction of a third track between Lokeren and Sint-Niklaas and the removal of level crossings	6.17	Realisation	Public (federal + region)
BE*	Infrastructure	Masterplan Hasselt	Capacity	2030.12	Masterplan Hasselt	19.00	Realisation	Public
BE*	Infrastructure	Pioneers project	Quality	2026.12	Pioneers project: IT track platform (port area of Antwerp)	0.97	Realisation	EU (Horizon 2020)
BE*	Infrastructure	Renewal works between Antwerpen - Leuven	Capacity	2024.12	Renewal works between Mechelen - Leuven and Antwerp	19.59	Realisation	Public (BRP)
BE*	Infrastructure	Rail Ghent Terneuzen Study	Capacity	2026.12	Upgrade of the cross-border railway connection Ghent (BE) and Terneuzen (NL) - Integrated Preparing phase	3.07	Realisation	Public + European
BE*	Infrastructure	Increase of line speed	Capacity	2024.12	Increase of line speed (100 km/h) on L24 between Glons - BE/DE border	0.10	Realisation	Public + European
BE*	Infrastructure	Spartacus project	Capacity	2025.12	Elimination of 9 level crossings on L34 between Diepenbeek and Bilzen	25.55	Realisation	Public (Federal + SPV)

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BE*	Infrastructure	Rail Port of Antwerp	Capacity	2026.12	Upgrade and electrification aiming to increase capacity and performance as well as cost reductions for rail operators and terminals on the Right Bank of Port of Antwerp (L223, bundle South, bundle Oorderen, MY)	61.51	Realisation	Public + European
BE*	Infrastructure	Kennedy Tunnel	Capacity	2025.12	Technological migration of the tunnel safety systems of the Kennedy railway tunnel in Antwerp	25.65	Realisation	Public
BE*	Infrastructure	Line 24 - 4 long tracks 750m at Montzen	Train length	2024.12	Construction of 4 side tracks of 750m	3.48	Realisation	Public + European
BE*	Infrastructure	Side tracks 750m **	Train length	2027.12	Construction of side tracks 750m at Bruges, Kortrijk, Tilly and Aubange	15.64	Secured	Public
DE	Infrastructure	Mainz/Wiesbaden - Mannheim	Capacity	2030.12	Construction High-Speed Line	4,050.00	Secured	Public + European
DE	Infrastructure	ABS/NBS Mannheim–Karlsruhe	Capacity	open	New line / Line upgrade Mannheim – Karlsruhe	N/A	Secured	Public + European
DE	Infrastructure	NBS Frankfurt - Mannheim	Capacity	open	New line	6,506.00	Secured	Public + European
DE	Infrastructure	ABS Kehl - Appenweier	Capacity	open	Speed increase	N/A	Planned	Public + European

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DE	Infrastructure	ABS/NBS Karlsruhe-Basel, Karlsruhe - Rastatt	Capacity	2026.12	Construction tunnel	1,080.00	Planned	Public + European
DE	Infrastructure	ABS/NBS Karlsruhe-Basel, Offenburg - Freiburg - Basel	Capacity	2041.12	Construction 3rd + 4th track	15,902.00	Planned	Public + European
DE	Infrastructure	ABS Ludwigshafen - Saarbrücken	Capacity	2025.12	Speed acceleration up to 200 km/h + ERTMS	827.00	Realisation + Planned	Public + European
DE	Infrastructure	Border Emmerich - Oberhausen	Capacity	stepwise from 2026.12	ABS 3rd track A relevant date/year for going-live can only be given once the building permission has been approved	2,341.20	Planned	Public + European + Region
DE	Infrastructure	ABS Grenze D/NL Kaldenkirchen - Viersen - Rheydt	Capacity	open	Double track Kaldenkirchen - Dülken and Rheydt - Rheydt-Odenkirchen, Curve of Viersen (incorporating German part of Iron Rhine)	N/A	Study / To be decided	Public
IT	Infrastructure	Upgrading for increasing line speed of the section Torino - Alessandria - Novi - Ligure SECOND PHASE)	Capacity	2036.01	Technological and Infrastructural upgrading for increasing the line speed. It includes the	100.00	Study / To be decided	State

					upgrade concerning of the remote control systems of some stations and headways (preparatory for ERTMS) .			
IT	Infrastructure	Upgrade to PC80 loading gauge on railway access from Novara/Milano to Domodossola	Capacity	2028.12	The project co-financed by the Swiss Confederation includes several actions aiming at upgrading to PC80 the profile of the lines to access the Swiss border sections	122.00	Secured	State+Swiss Confederation
IT	Infrastructure	Power supply system upgrade (Chiasso -Milano Smistamento)	Interoperability	2024.12	Power supply system upgrade (Chiasso - Milano Smistamento))	21.00	Secured	State
IT	Infrastructure	Milano Smistament RRT Upgrading	Interoperability	2025.12	Transfer station upgrading interventions (signalling upgrading, demolitions and independences with the new Alptransit intermodal terminal realization, increasing train length up to 740m).	22.00	Secured	State* (PNRR funding on ongoing projects)
IT	Infrastructure	Upgrade to 750 m Track Length on railway access on Domodossola - Borgomanero Line	Capacity	2027.12	Upgrading to 750 m track length of some stations of Domodossola - Borgomanero	15.30	Secured	State

IT	Infrastructure	Technological Upgrading of Tortona - Bivio Fegino	Interoperability	2026.12	Upgrade concerning of the remote control systems of some stations and headways (preparatory for ERTMS) including small infrastructural upgrading interventions	70.00	Secured	State
IT	Infrastructure	Technological Upgrading of Genova Node (Last Phase)	Interoperability	2026.12	Technological upgrading of some stations and of some section of the Node. This project will complete the technological upgrading of the node	100.00	Secured	State
IT	Infrastructure	Upgrading of Genova - Ovada - Alessandria Line (PHASE)	Capacity	2026.12	Upgrading of Genova - Ovada - Alessandria Line (PHASE)	84.00	Secured	State+EU
IT	Infrastructure	“Rail Plan” interventions in the Sampierdarena port basin	Capacity	2026.12	“Rail Plan” interventions in the Sampierdarena port basin: 1) “Fuorimuro” in-port freight yard upgrading and the “Dorsale Ferroviaria” (port railway backbone) completion. 2) Upgrading of the connection of the new Bettolo Terminal	75	Secured	State

					with Campasso rail freight yard, related automation and electrification of the connection to the rail tracks. 3) New "Rugna" rail yard.			
IT	Infrastructure	Seregno - Bergamo - Treviglio, Gronda Est	Capacity	2036.12	Bypass Milano node	1,000.00	Planned	State
IT	Infrastructure	Upgrading Gallarate-Parabiago-Rho section	Capacity	2026.12	<p>Infrastructural and technological upgrade of the Domodossola - Milano line, section Gallarate - Rho.</p> <p>It involves:</p> <ul style="list-style-type: none"> - the installation of a fourth track alongside the railway line between the stations of Rho and Parabiago - technology upgrade for capacity increase - Link Y in Busto Arsizio - Further Infrastructural upgrade between Parabiago and Gallarate. <p>The first phase of the project is expected in 2026</p>	827.70	Planned	State* (PNRR funding on ongoing projects)
IT	Infrastructure	Tortona-Voghera quadrupling of line	Capacity	2030.12	Upgrade to 4 tracks of the section Tortona-Voghera (1st phase 31/12/2024)	700	Planned	State+EU

IT	Infrastructure	Doubling of the railway track of the Vignale - Oleggio - Arona line	Capacity	2035.06	Railway track doubling of the Vignale - Oleggio - Arona line	424.00	Planned	State
IT	Infrastructure	Upgrade to 4 tracks on the section Pavia - Milano Rogoredo	Capacity	2030.12	Upgrade to 4 tracks between Milano Rogoredo and Pavia (26 km), with the construction of the Pieve Emanuele station. Milano Rogoredo station is already compliant with the new line requirements. (1st phase 31/12/2026)	900.00	Planned	State* (PNRR funding on ongoing projects)
IT	Infrastructure	Upgrading to 750 m track length of the rail lines from the Border ITA-CH and Milano/Novara	Capacity	2026.12	Upgrading to 750 m track length of the rail lines from the Border ITA-CH and Milano/Novara (Section Milano - Chiasso Completed)	51.50	Planned	State
IT	Infrastructure	Upgrading Milano node	Capacity	2026.12	Upgrading of the Node of Milano (including the PRG and ACC of Lambrate, Centrale, Porta Garibaldi, Certosa, Gallarate, upgrade of safety distance systems within the node)	497.50	Planned	State* (PNRR funding on ongoing projects) +EU
IT	Infrastructure	Upgrading for increasing line speed of the section Tortona - Milano	Capacity	2026.12	Technological and Infrastructural upgrading for increasing the line speed. It includes the upgrade concerning of the remote control	244.00	Planned	Public (PNRR funding on ongoing projects)

					systems of some stations and headways (preparatory for ERTMS)			
IT	Infrastructure	Novara node upgrade - Phase 1	Capacity	2028.12	Phase 1) Terminal upgrading including the bypass of Novara Centrale station for freight trains (connecting directly Vignale station) and upgrade intermodal terminal (Ro-La). Phase 2) Completion of planned works in Vignale, Boschetto and "Novara Centrale" including General Regulatory Plan (PRG) and the Computerised Central Apparatus ("CCA") for controlling and managing all station plant (signals, points, level crossings): the intervention allows to increase the Novara Boschetto transfer station capacity, to upgrade Vignale in order to manage trains of 740m and to run trains in Novara Centrale in accordance with maximum safety requirements.	190.50	Planned	State

					Development of traffic management system. Resolution of physical bottlenecks			
IT	Infrastructure	Torino - Alessandria gauge upgrade to P/C 80	Capacity	2028.12	Torino - Alessandria loading gauge upgrade to P/C 80	62.00	Planned	State
IT	Infrastructure	Upgrade to PC80 loading gauge on railway access from Milano/Novara to Genova	Capacity	2026.12	Upgrade to P/C80 loading gauge of the connecting line to the Terzo Valico from Novara and Milano to Genova	358.00	Planned	State
IT	Infrastructure	Upgrading for increasing line speed of the section Torino - Alessandria - Novi - Ligure (FIRST PHASE)	Capacity	2025.12	Technological and Infrastructural upgrading for increasing the line speed. It includes the upgrade concerning of the remote control systems of some stations and headways (preparatory for ERTMS) .31/12/2024 (1st phase)	75,00	Planned	State* (PNRR funding on ongoing projects)
IT	Infrastructure	Upgrading to 750 m track length of some stations of Voghera - Piacenza	Capacity	2036.12	Upgrade to 750 m Track Length on railway access on Voghera - Piacenza	N/A	Planned	State

IT	Infrastructure	Upgrading to 750 m track length on railway access from Milano /Novara to Genova	Capacity	2026.12	Upgrading to 750 m track length on railway access from Milano /Novara to Genova	28.00	Planned	State
IT	Infrastructure	Upgrade to 750 m Track Length on railway access on Milano - Piacenza Line	Capacity	2035.12	Upgrading to 750 m track length of some stations of Milano - Piacenza	N/A	Planned	State
IT	Infrastructure	Infrastructure upgrade of Bivio Rosales - Seregno Line	Capacity	2035.12	Upgrading Measure between Bivio Rosales and Seregno (New Side Tracks with length of 750 m, New lay-out of Rosales Junction and other upgrading of the line	N/A	Planned	State
IT	Infrastructure	Genova Node Terzo valico dei Giovi	Capacity	2026.12	"1. Project "Voltri-Brignole Infrastructural Upgrading". Aims: improving the Genoa railway node by separating the metropolitan and regional rail system from long-distance traffic flows and enhancing intermodality by improving the freight service connection with the maritime trade traffic. 2. High speed railway link "Terzo valico dei Giovi". The new "Terzo Valico dei Giovi" line runs	9,034	Realisation	Public (PNRRfunding on ongoing project)+EU

				<p>between Liguria and Piedmont, through twelve municipalities in the provinces of Genoa and Alessandria. It is approximately 53 kilometres long, including 39 km of tunnels, and also has 14 km of interconnections with the existing rail network, for a total of 67 km of new infrastructure. The new line will integrate existing lines and it will be compliant with TEN regulation standards among which gradient and loading gauge requirements that would be difficult to implement on the old lines . “Terzo Valico dei Giovi” line will permit a significant expansion in freight transport between Genoa and northern Tyrrhenian port system, northern Italy and Europe.</p> <p>3. Campasso station upgrade and Campasso-Port connection restore - Restoring the</p>		
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					connection to Genoa S. Limbana - Upgrade to PC45 to S. Benigno - 8-platform station construction for freight traffic providing 750 m module - New ACCM"			
IT	Infrastructure	Upgrade of section between Domodossola – Iselle	Capacity	2028.12	The project co- financed by the Swiss Confederation includes upgrading of some station and the line for increasing the capacity for PC 80 train gauge	59.00	Secured	State+Swiss Confederation
NL	Infrastructure	Venlo PHS 740 meter freight trains	Train length	open	extension of 1 or 2 tracks at Venlo for 740 meter freight trains	N/A	Study / To be decided	Public
NL	Infrastructure	Increasing the capacity of the Sophiatunnel	Capacity	open	investigating capacity and recommend measures to increase the capacity of the Sophiatunnel from 6 trains/hour to 8 trains/hour.	N/A	Study / To be decided	Public
NL	Infrastructure	Redevelopment Waalhaven Zuid freight yard phase 2 (after 2030)	Train length	2030.12	further expansion of Freight Yard Waalhaven Zuid (including 8 additional tracks for 740 m trains) to be decided after 2030	N/A	Study / To be decided	Public

NL	Infrastructure	Roosendaal 2 tracks for 740 m trains	Capacity	2026.12	construction of 2 tracks for reversing freight trains of 740 m.	N/A	Study / To be decided	public
NL	Infrastructure	Redesign SY Botlek	Capacity	2030.01	Redesign SY Botlek (TBD 2027-2030)	N/A	Study / To be decided	public
NL	Infrastructure	Electrification 2 tracks Europoort	Capacity	2026.01	Electrification 2 tracks Europoort	N/A	Study / To be decided	public
NL	Infrastructure	Rail Ghent Terneuzen (NL side)	Capacity	2030.01	The Rail Ghent Terneuzen project consists of three possible rail developments. These three components together ensure optimum capacity, reliability and efficiency of the rail network in and around the North Sea Port port area. 1) New connection Axel and Zelzate (East bank) 2) New south-east Curve Sluiskilbrug (East-side) 3) Expansion to the north Kluizendok ('Zandeken')	200.00	Study / To be decided	public
NL	Infrastructure	2 tracks for 740 m trains Moerdijk	Capacity	2025.06	2 tracks for 740 m trains Moerdijk	N/A	Study / To be decided	public
NL	Infrastructure	South-West curve Meteren	Capacity	2030.06	new connection Betuweline (Kijfhoek) to 's-Hertogenbosch and Venlo	N/A	Planned	public

NL	Infrastructure	Improving and upgrading capacity Hamont/Budel border - border NL/DE	Capacity	open	study routing freight trains Antwerp - Ruhr area. (on hold)	N/A	Planned	Public
NL	Infrastructure	Redevelopment Waalhaven Zuid freight yard fase 1	Train length	2027.07	construction of 5 tracks for 740 m trains + expansion of locomotive parking capacity	60.00	Planned	Public
NL	Infrastructure	Rail terminal Gelderland (RTG Valburg)	Capacity	2025.12	construction of a new terminal + changes to CUP Valburg yard	N/A	Planned	private, Public
NL	Infrastructure	SY Maasvlakte Zuid + phase 1	Capacity	2027.04	Construction of the first bundle of tracks on the new yard Maasvlakte Zuid + adjustment C2 bocht (commissioned by Port of Rotterdam)	100.00	Planned	Public
NL	Infrastructure	Dive-under at Amsterdam Dijkgracht	Capacity	2028.12	free entrance to Amsterdam Westhaven	N/A	Realisation	Public
NL	Infrastructure	4 tracks 's Hertogenbosch - Vught aansl. and dive-under Vught	Capacity	2029.12	Adding a fourth track between 's Hertogenbosch and Vught aansluiting Construction of a Dive-under at Vught aansluiting	N/A	Realisation	Public
NL	Infrastructure	Corridor study 740 m Rotterdam Kijfhoek - Venlo border	Train length	2021.12	This study examines which measures are needed at Lage Zwaluwe, Tilburg GE, Eindhoven, Tilburg Loven to be able to run with 740 m trains on the Rotterdam - Venlo route.	1.00	Realisation	Public

NL	Infrastructure	Additional track SY A'dam Aziëhavenweg	Capacity + Train length	2025.05	construction of additional arrival and departure track for 740 m trains	N/A	Realisation	Public
CH	Infrastructure	Loetschberg Base Tunnel, 2nd track middle part	Capacity + Interoperability + Quality	2033.12	Equipping of section Ferden-Mitholz (2nd tube) with railway infrastructure ("partial extension"). Optionally, the excavation of a second tube between Mitholz and Frutigen will be evaluated ("full extension"). Strategic Development Project of Switzerland. Planned as part of the national offer STEP AS 2035. Parliament's decision on the "partial or full extension" is expected for 2024. Start of implementation not before 2027. Commissioning not before 2034.	620	Study / To be decided	Public, AS 35, Federal
CH	Infrastructure	Upgrade shunting yard Basel RB	Capacity	2025.11	New parking areas for locos, longer sidings, capacity	75.49	Realisation	Public AS25

					improvements Basel RB			
CH	Infrastructure	Unbundling and bypass MuttENZ	Capacity	2025.12	Unbundling and bypass MuttENZ Construction programme AS 2025 knot Basel	320	Realisation	Public AS25
CH	Infrastructure	Upgrade shunting yard Basel RB	Train length + Capacity	2024.12	Upgrade shunting yard Basel RB Benifit: "Capacity and more long trains" Costs included in AS 2025 knot Basel	135	Realisation	Public AS25
CH	Infrastructure	3rd track Giubiasco-Bellinzona	Quality	2029.12	3rd track Giubiasco-Bellinzona	211.04	Realisation	Public AS35
CH	Infrastructure	Rupperswil-Maegenwil	Capacity	2023.12	Capacity expansion	131.6	Realisation	Public AS25
CH	Infrastructure	Efficiency improvement Chiasso	Capacity + Train length	2023.09	Extension of sidings up to 750m	162.4	Realisation	Public AS25
CH	Infrastructure	Disentanglement Liestal	Capacity	2025.12	Liestal - Construction of crossover possibilities	332.9	Realisation	Public AS25
CH	Infrastructure	Basel - Bellinzona - Chiasso Headway reduction	Train length + Capacity	2025.06	Block headway 3', Bellinzona, incl 750 m Bellinzona - Chiasso	61.1	Realisation	Public NEAT
CH	Infrastructure	Guemligen - Muensingen	Capacity	2038.12	Guemligen - Muensingen: construction disentanglement Wankdorf South and Guemlingen South (instead of a 3rd track)	913.6	Secured	Public AK35
IT	Signalling	Torino -Padova conventional line Infrastructure/technological development	Interoperability	2024.12	Technologic upgrade + Command system control upgrading and control for	850.84	Realisation	Public (PNRR funding on ongoing projects) +EU

					Conventional line Turin - Padova (Control centre in Milano Greco P., Torino Lingotto and Verona Porta Nuova) + upgrading to 740 m for some stations. Resolution of physical bottleneck			
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