



## **Group of Experts on Benchmarking Transport Infrastructure Construction Costs - rail**

Geneva, 30-31 January 2020

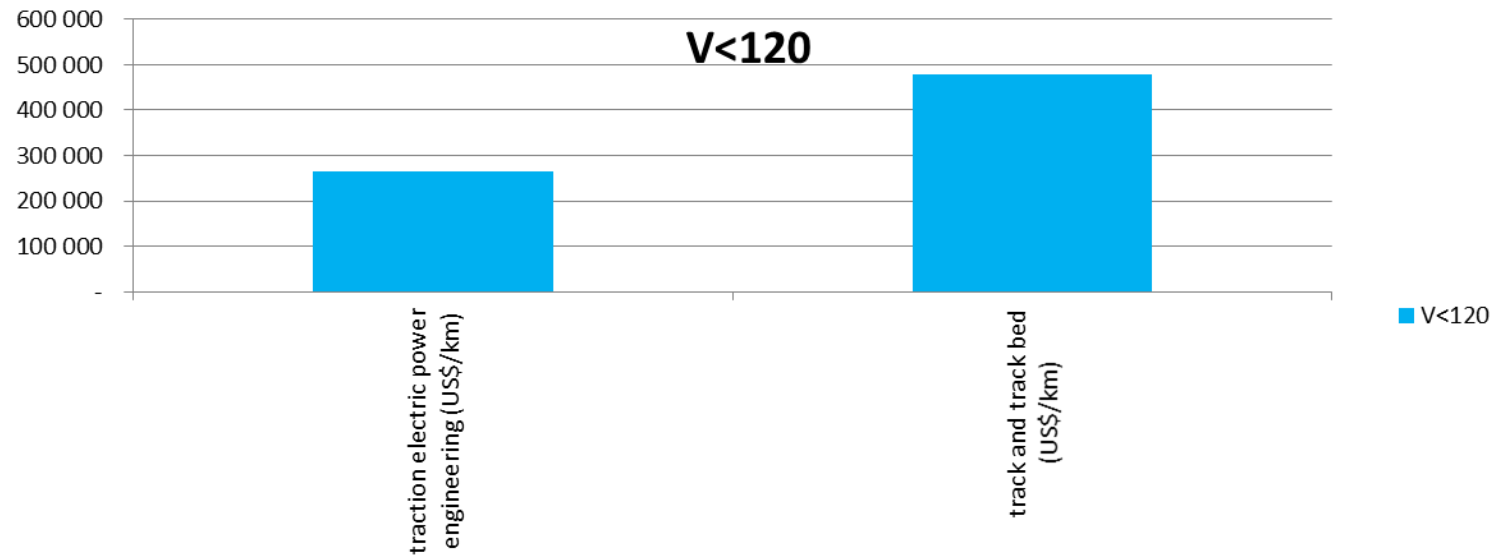
# Answers received

Country/organisation	Projects	Elements of infrastructure
Bulgaria	V	V
Croatia	V	
Finland	V	
Poland		V
Turkey	V	V
UNECE TER	V	

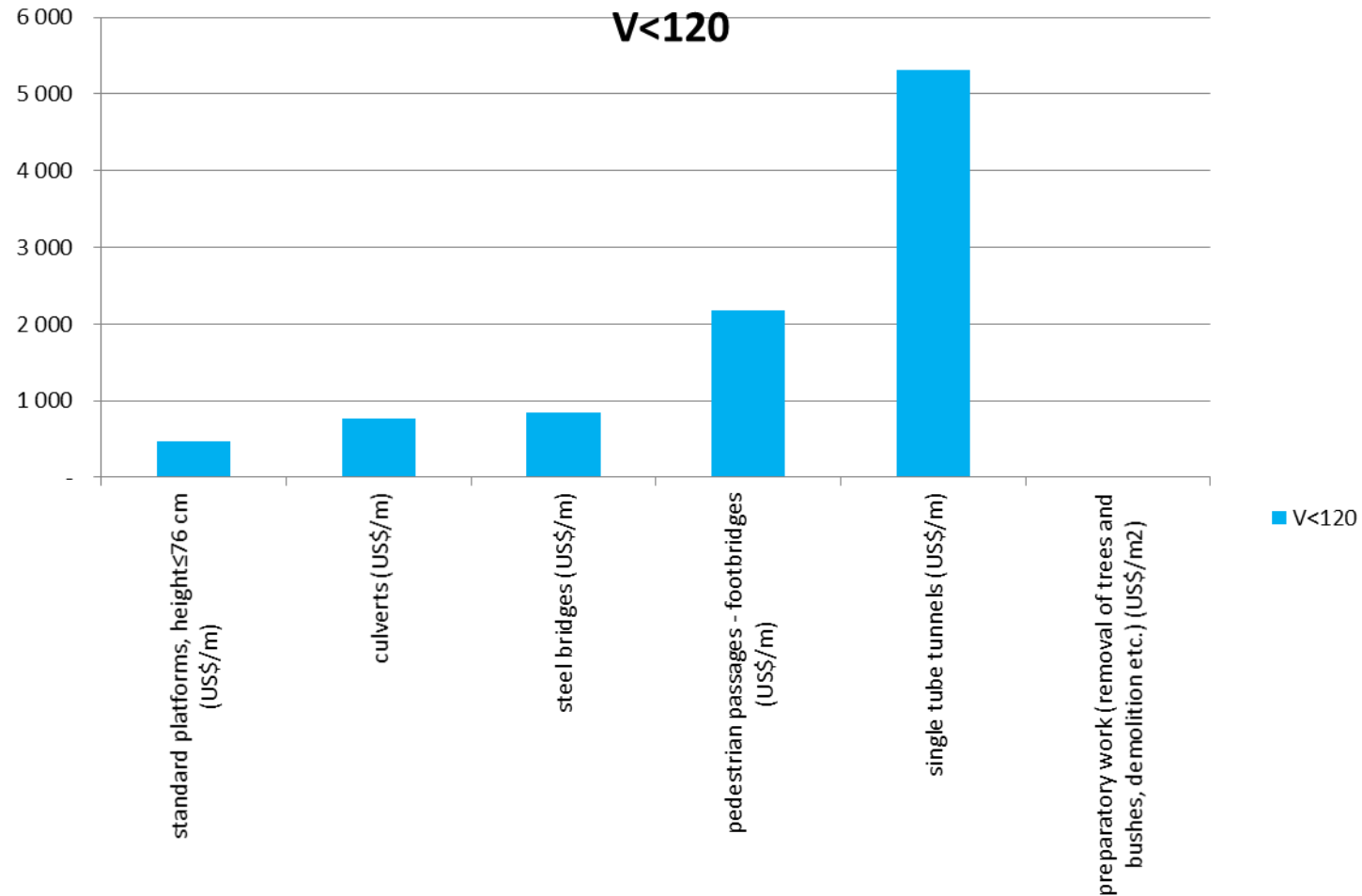
# Bulgaria

	V<120	120<V≤160 km/h
new construction	-	-
upgrade	-	5
renewal	-	-

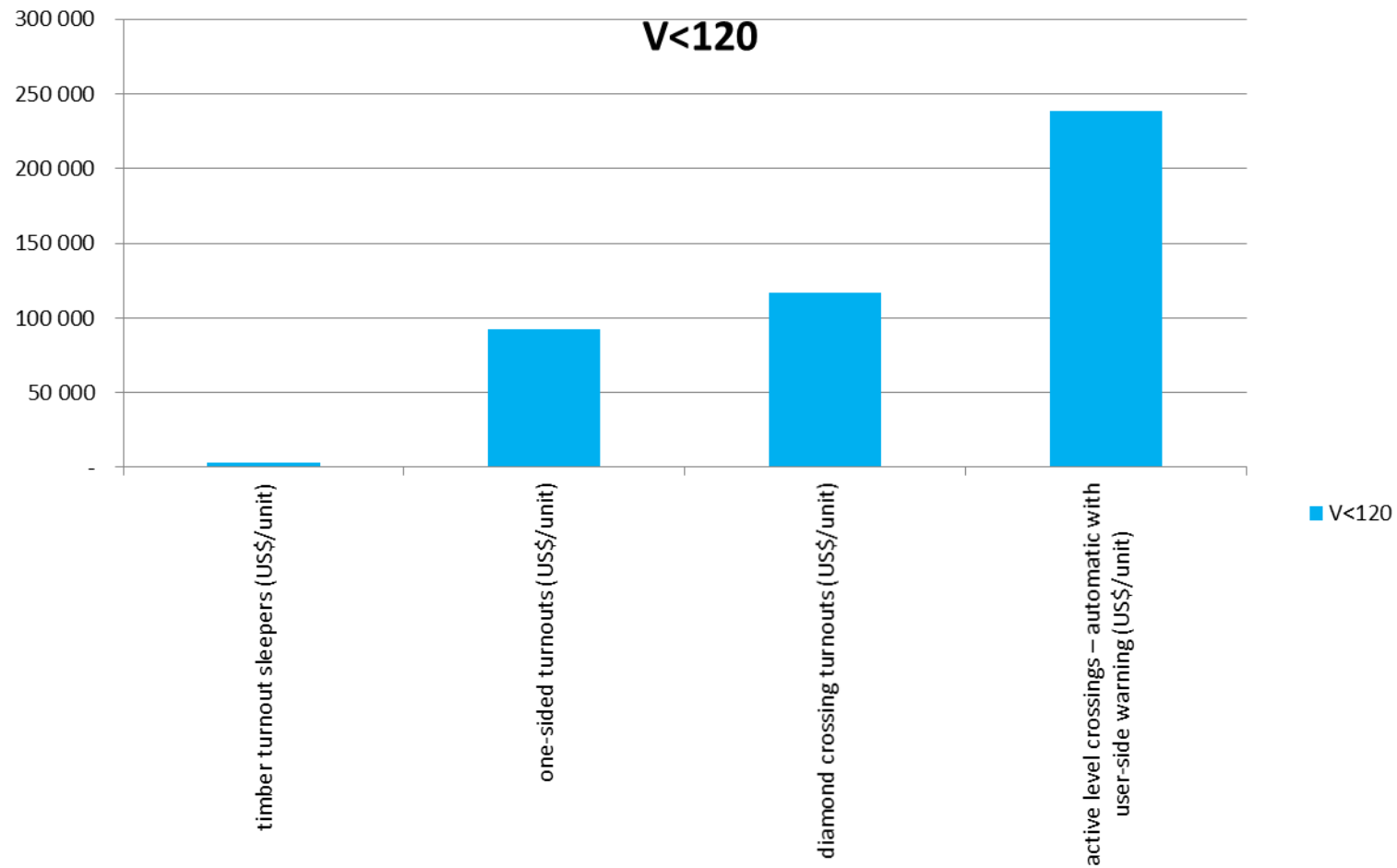
# Bulgaria – renewal (US\$/km)



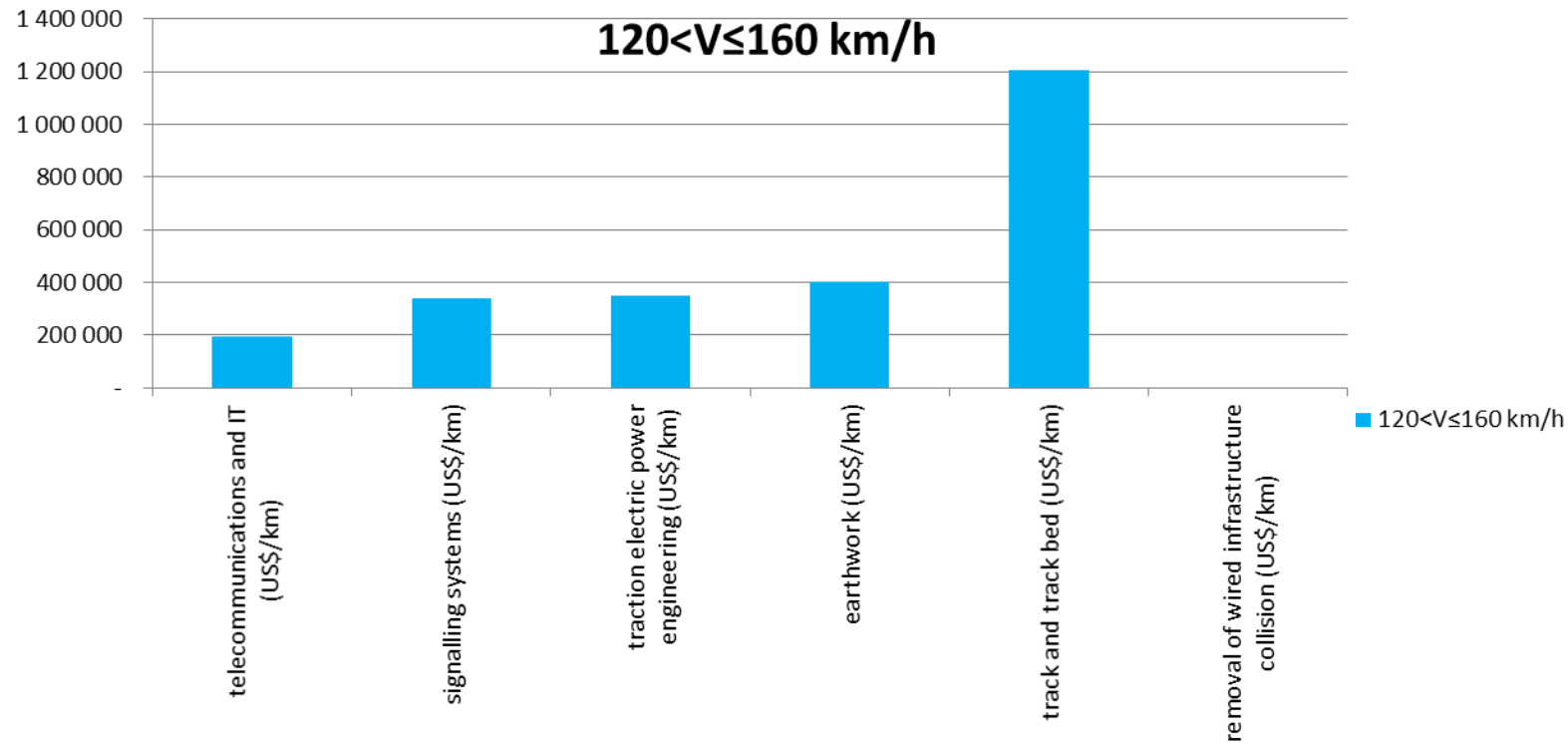
# Bulgaria – renewal (US\$/m or US\$/m<sup>2</sup>)



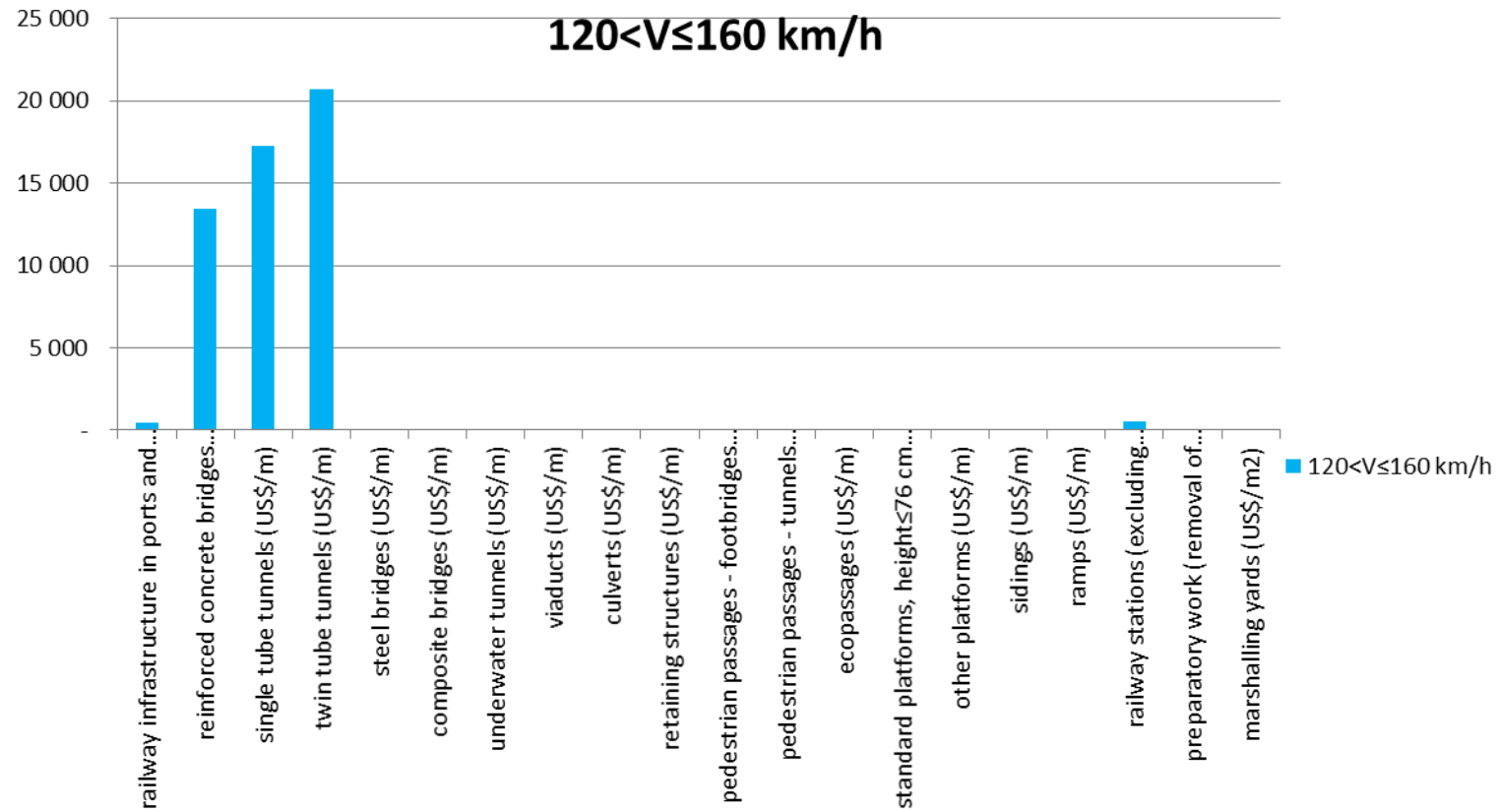
# Bulgaria – renewal (US\$/unit)



# Bulgaria – upgrade (US\$/km)

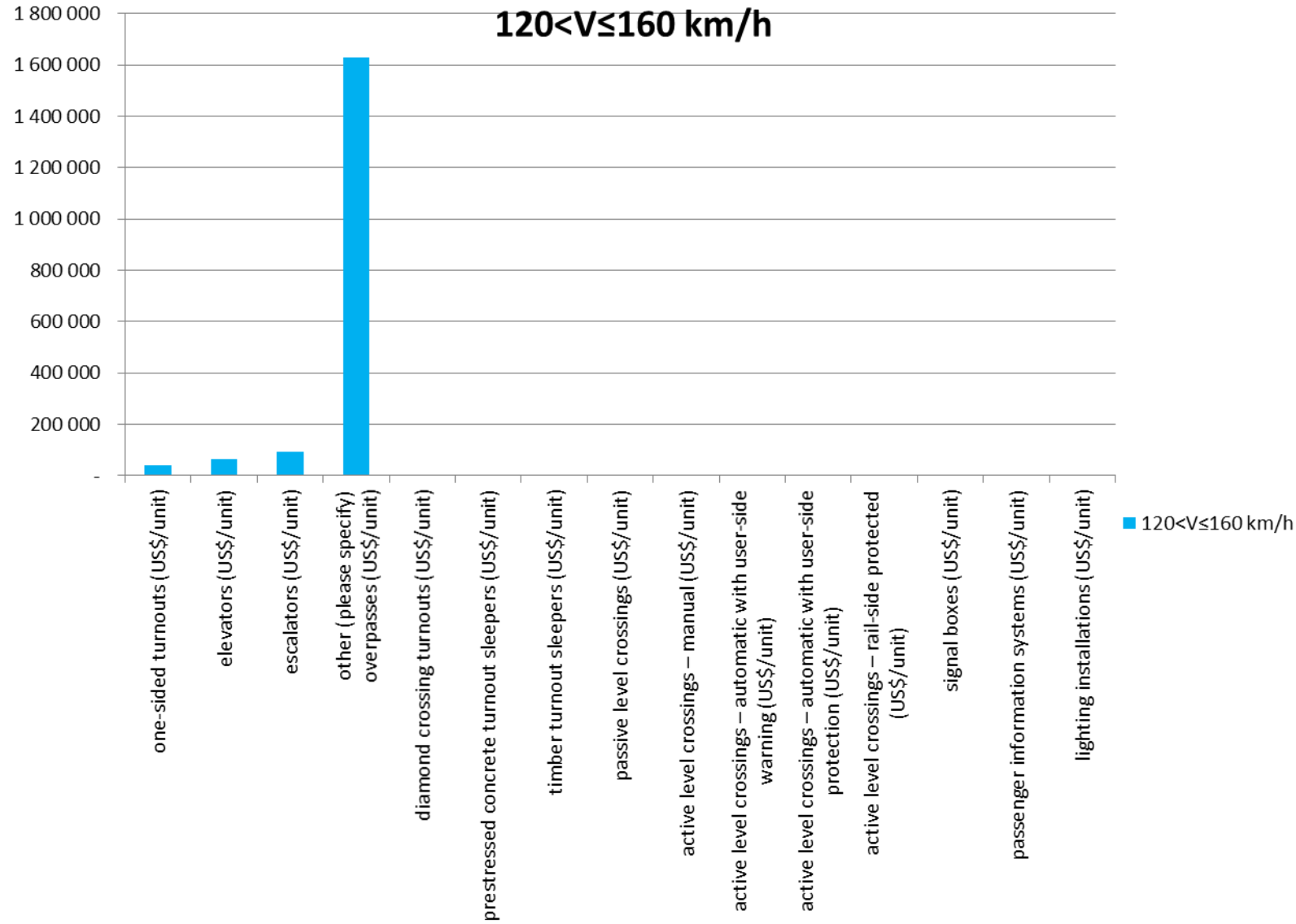


# Bulgaria – upgrade (US\$/m or US\$/m<sup>2</sup>)





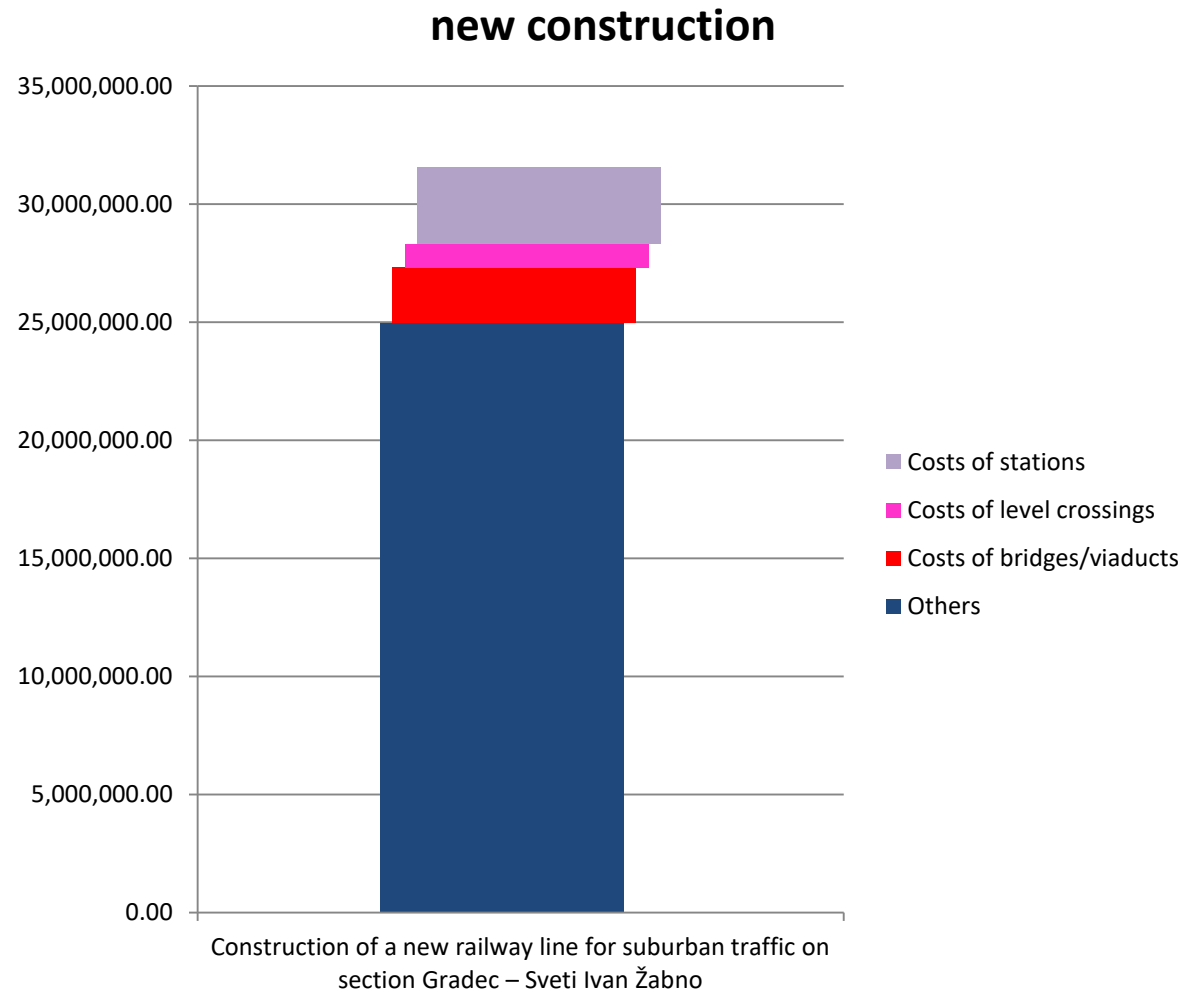
# Bulgaria – upgrade (US\$/unit)



# Croatia

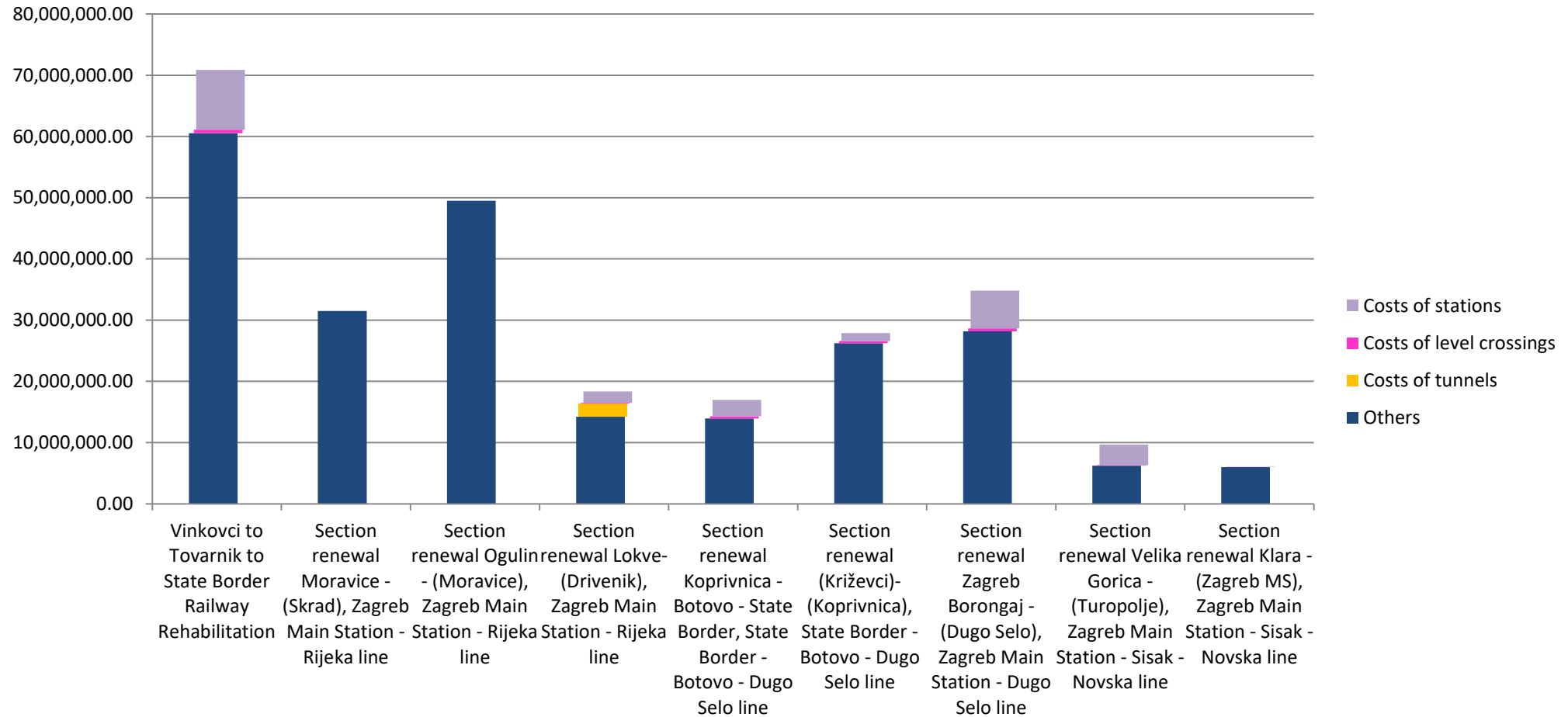
	V<120	120<V≤160 km/h
new construction	1	-
upgrade	1	3
renewal	4	5

# Croatia – new construction



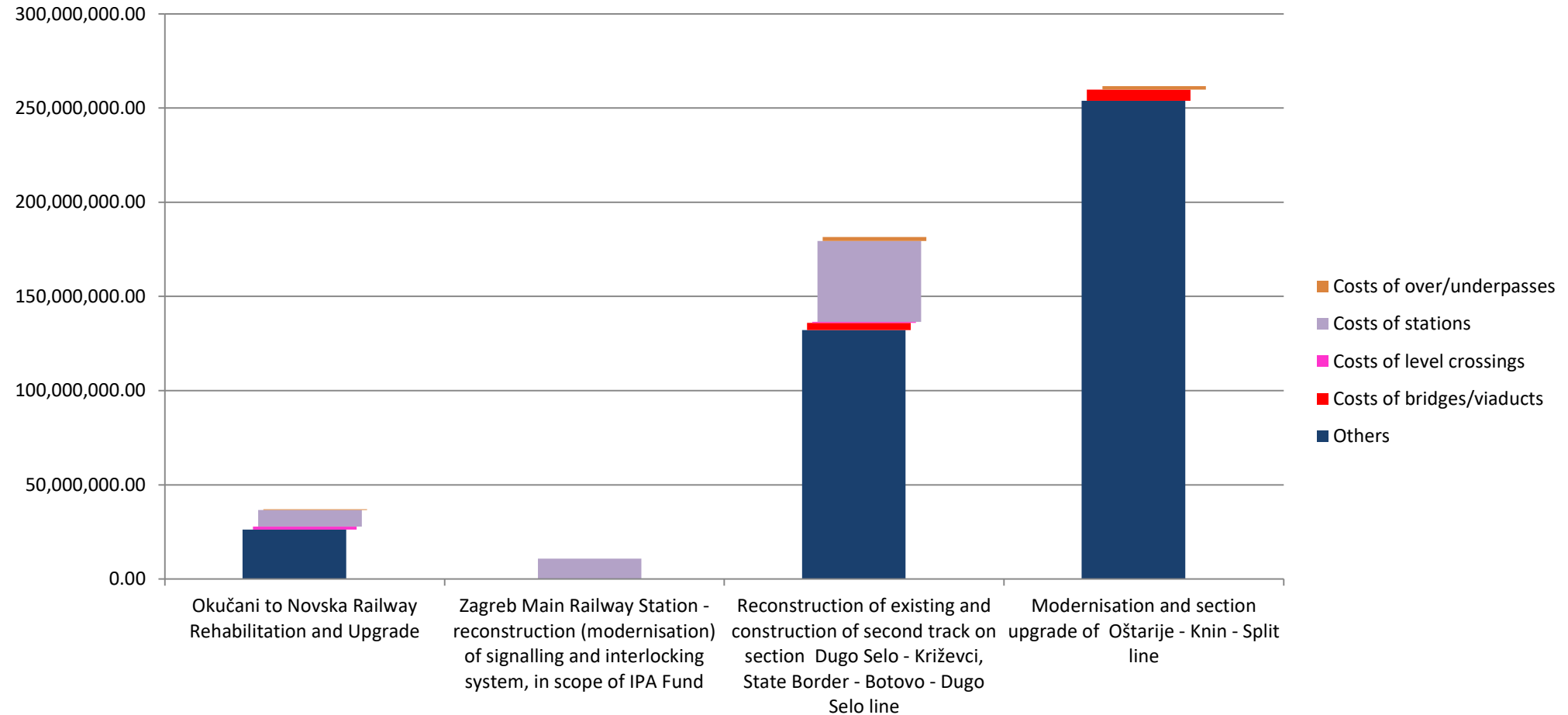
# Croatia – renewal

## renewal



# Croatia – upgrade

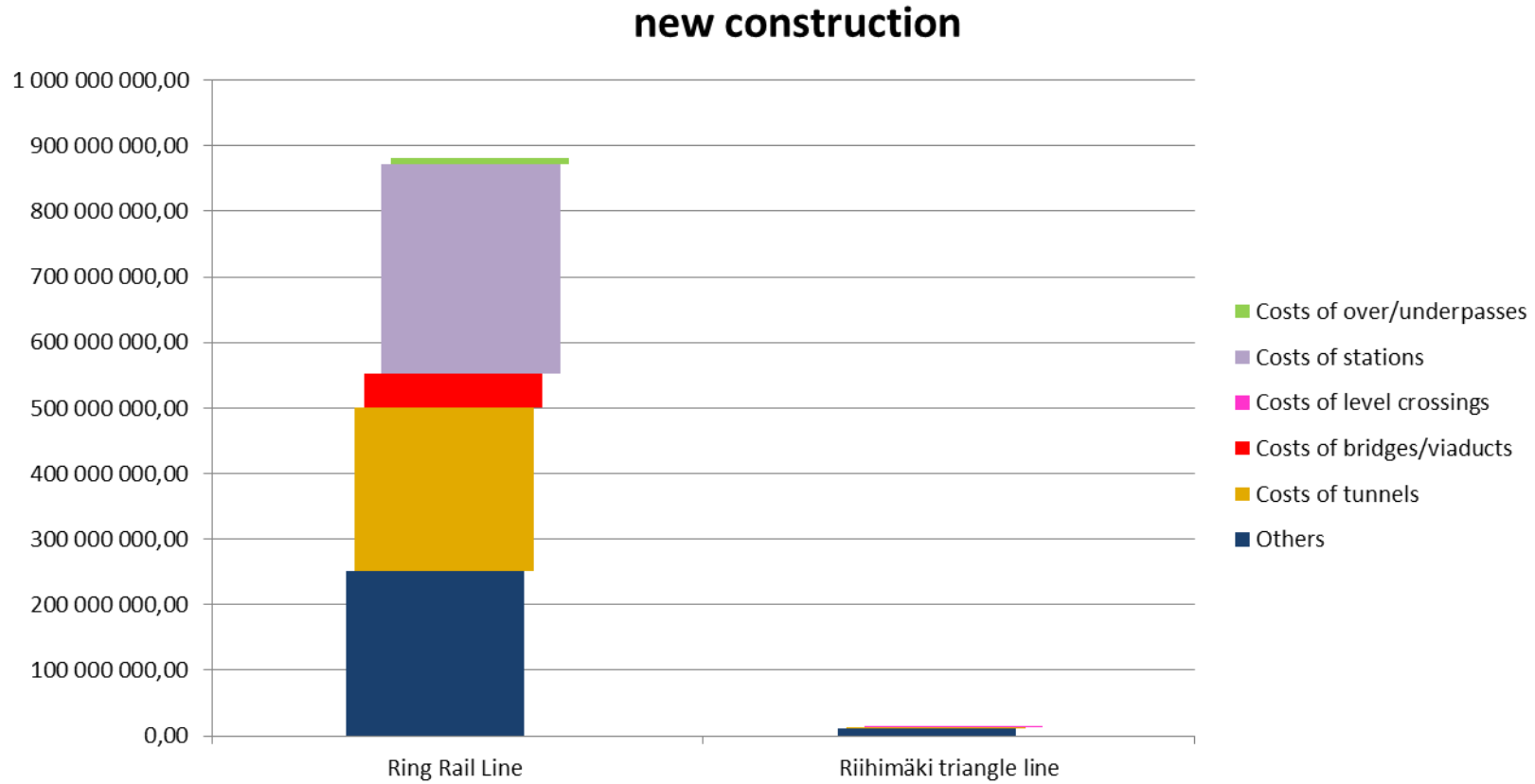
## upgrade



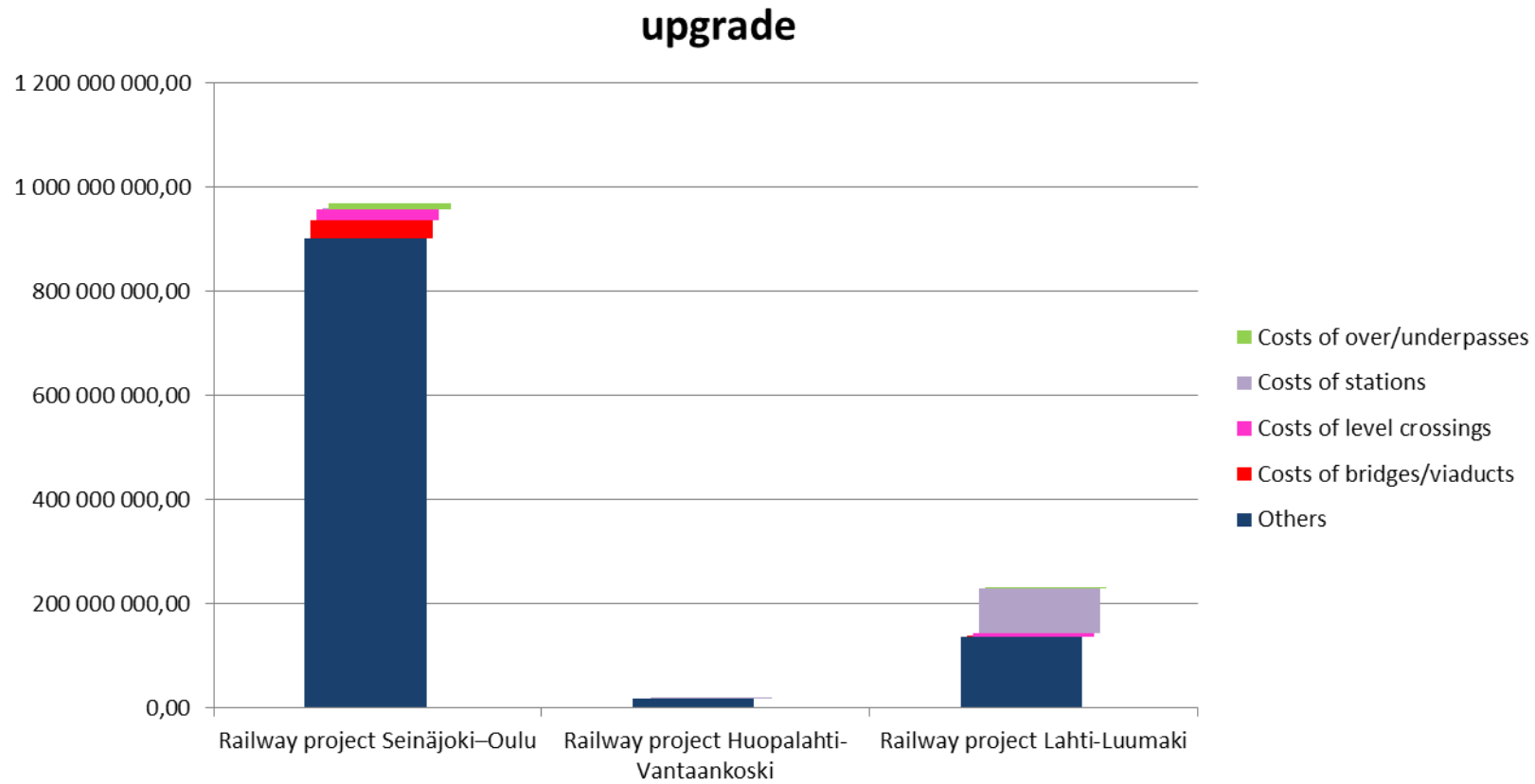
# Finland

	V<120	120<V≤160 km/h
new construction	2	-
upgrade	2	1
renewal	-	-

# Finland – new construction

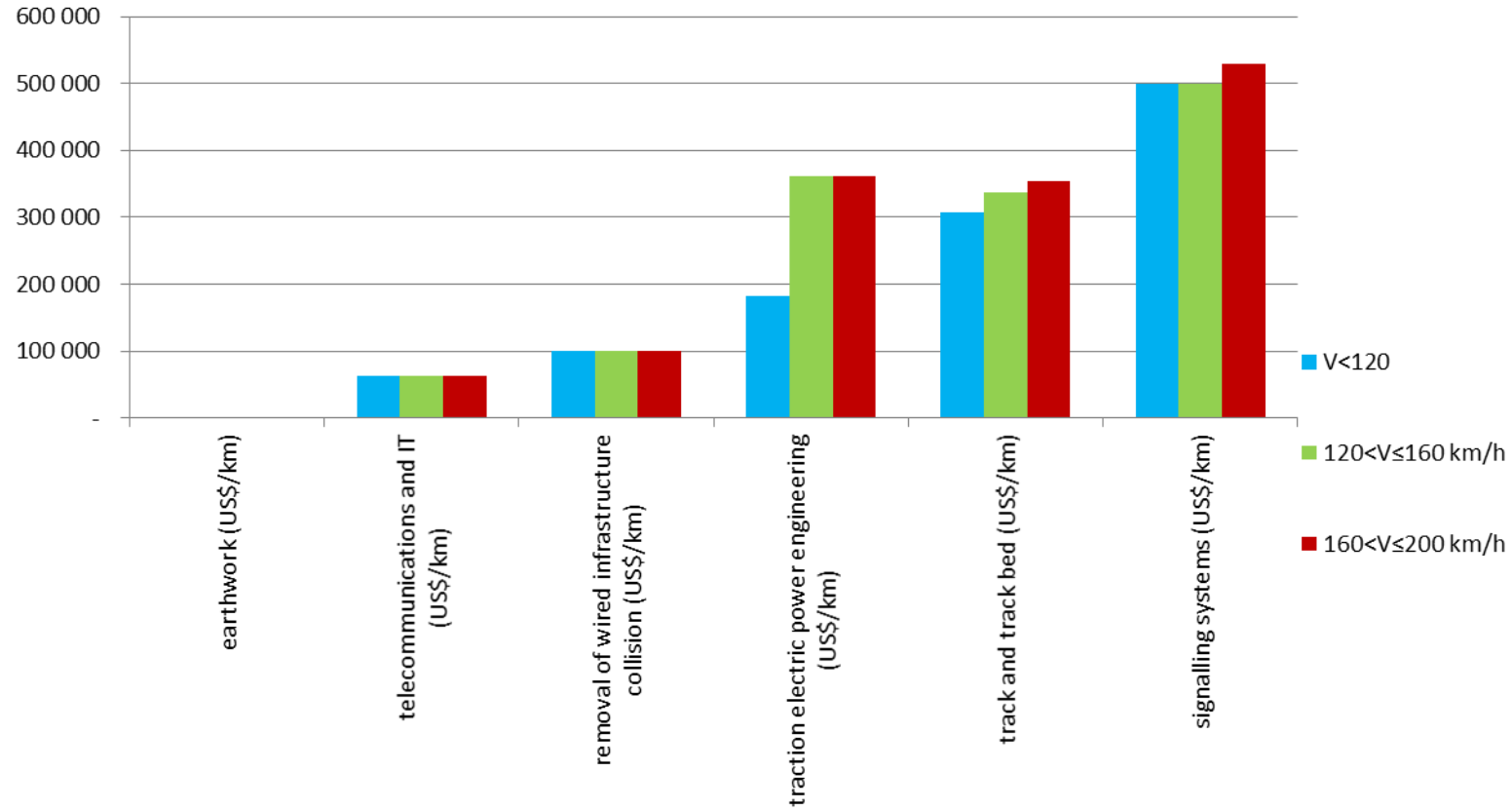


# Finland – upgrade

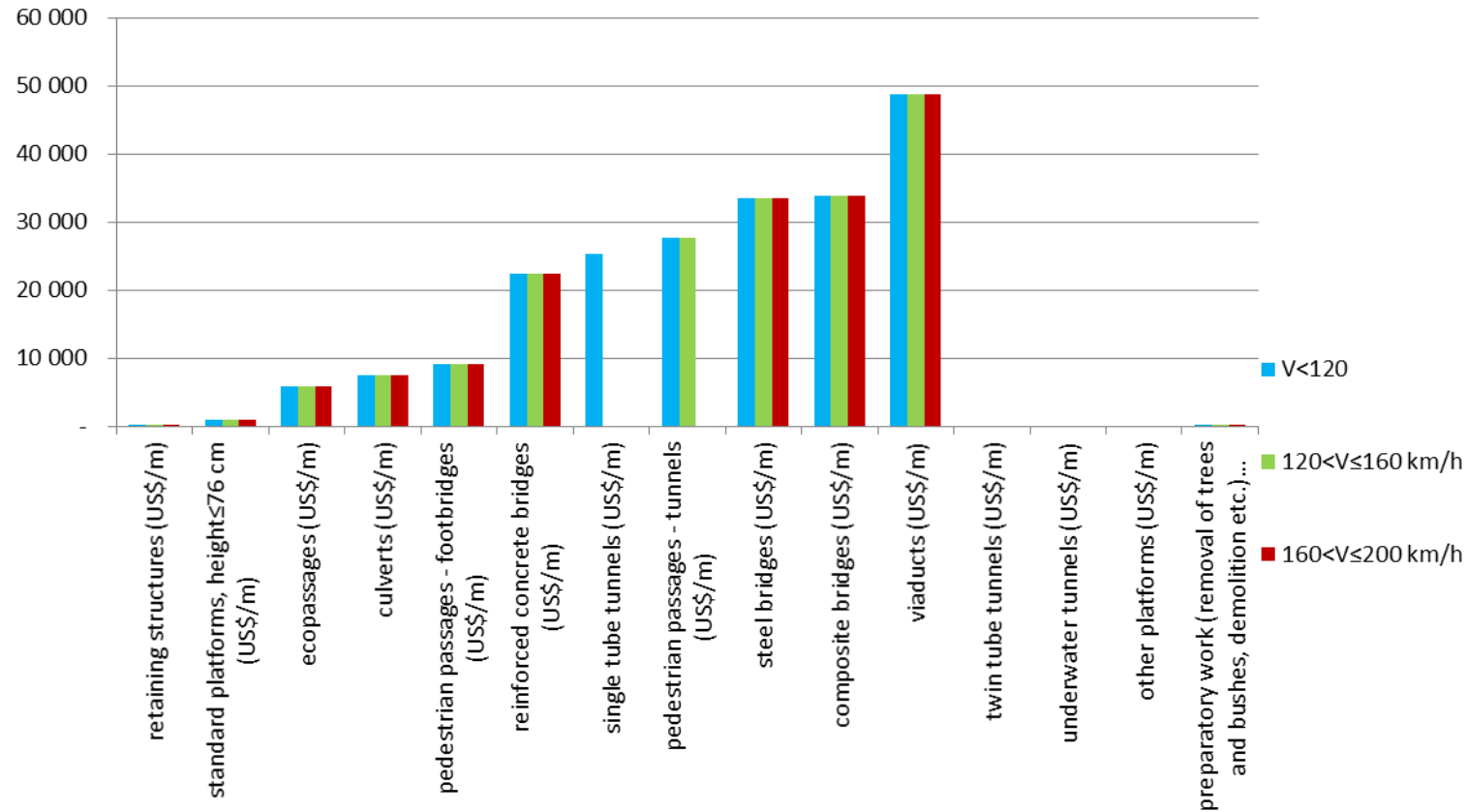




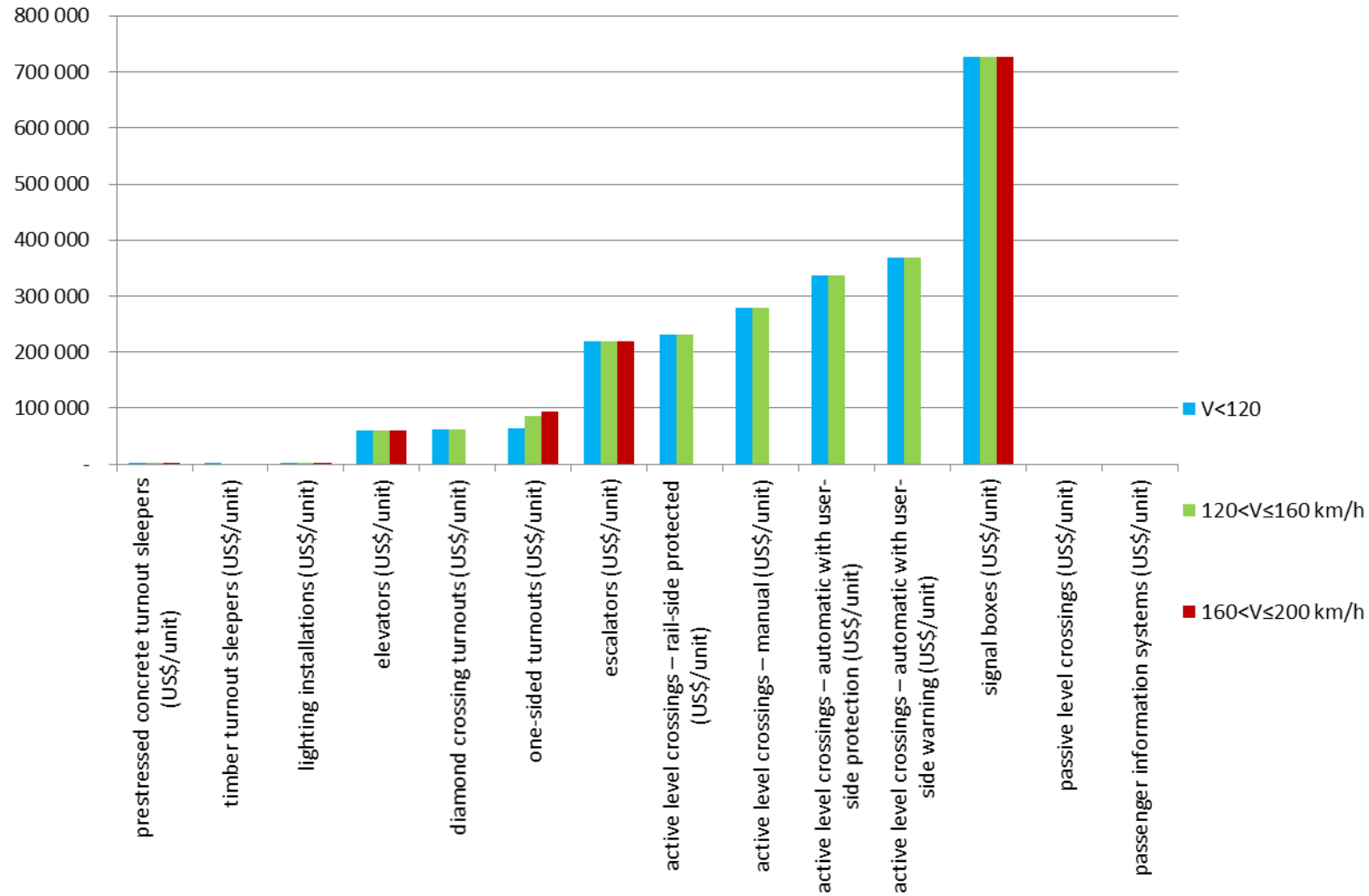
# Poland – upgrade (US\$/km)



# Poland – upgrade (US\$/m or US\$/m<sup>2</sup>)

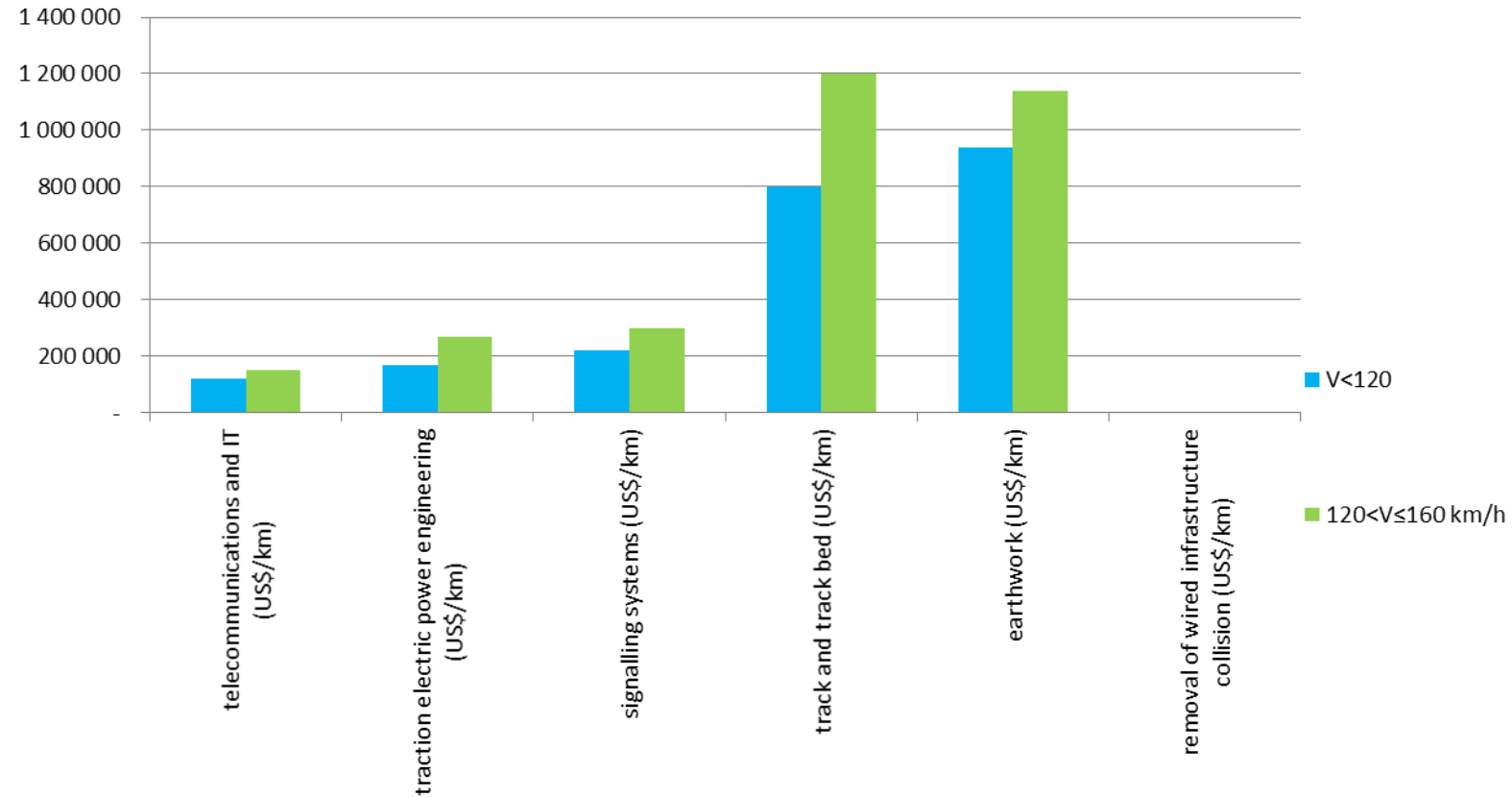


# Poland – upgrade (US\$/unit)

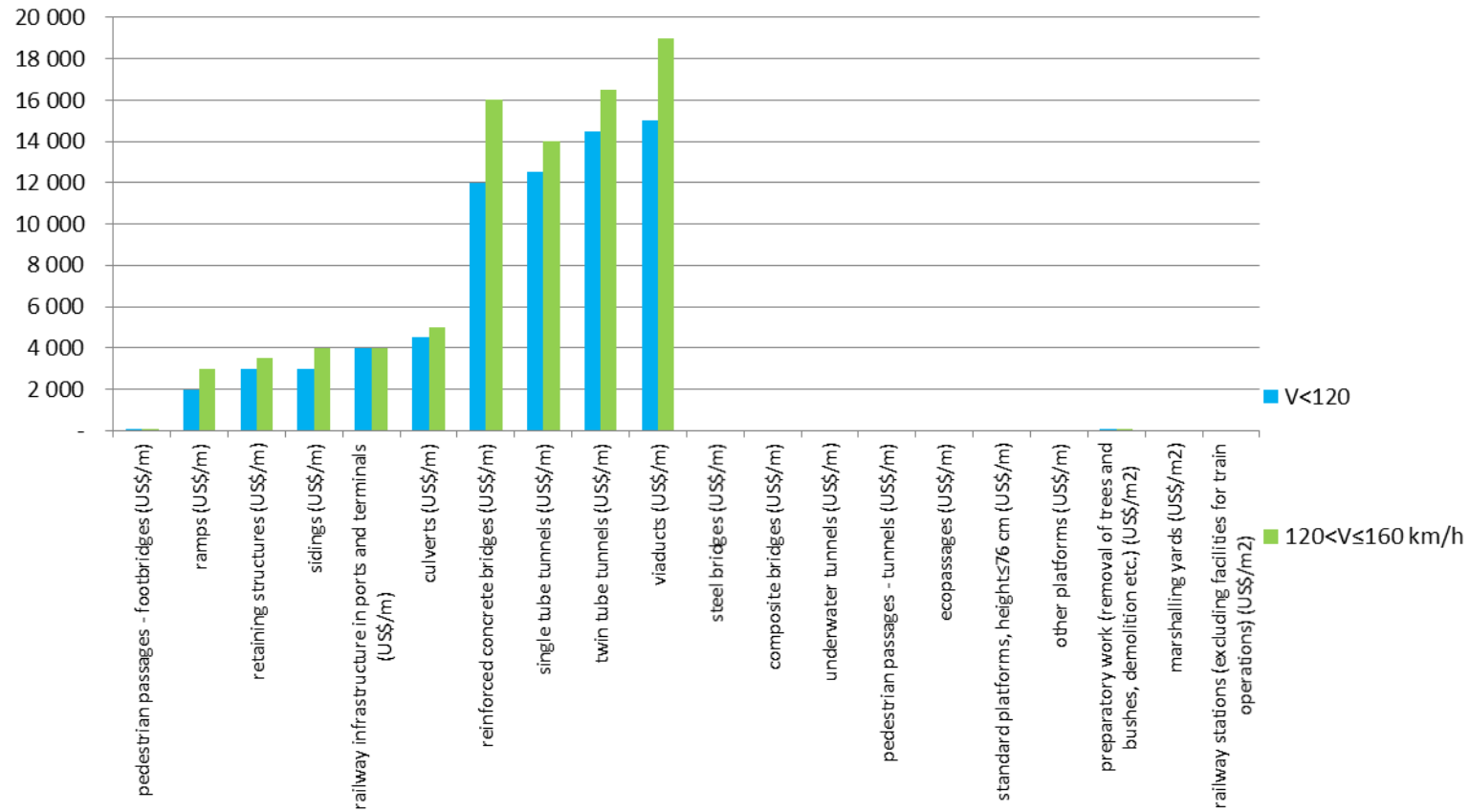


	V<120	120<V≤160 km/h
new construction	1	2
upgrade	-	-
renewal	-	-

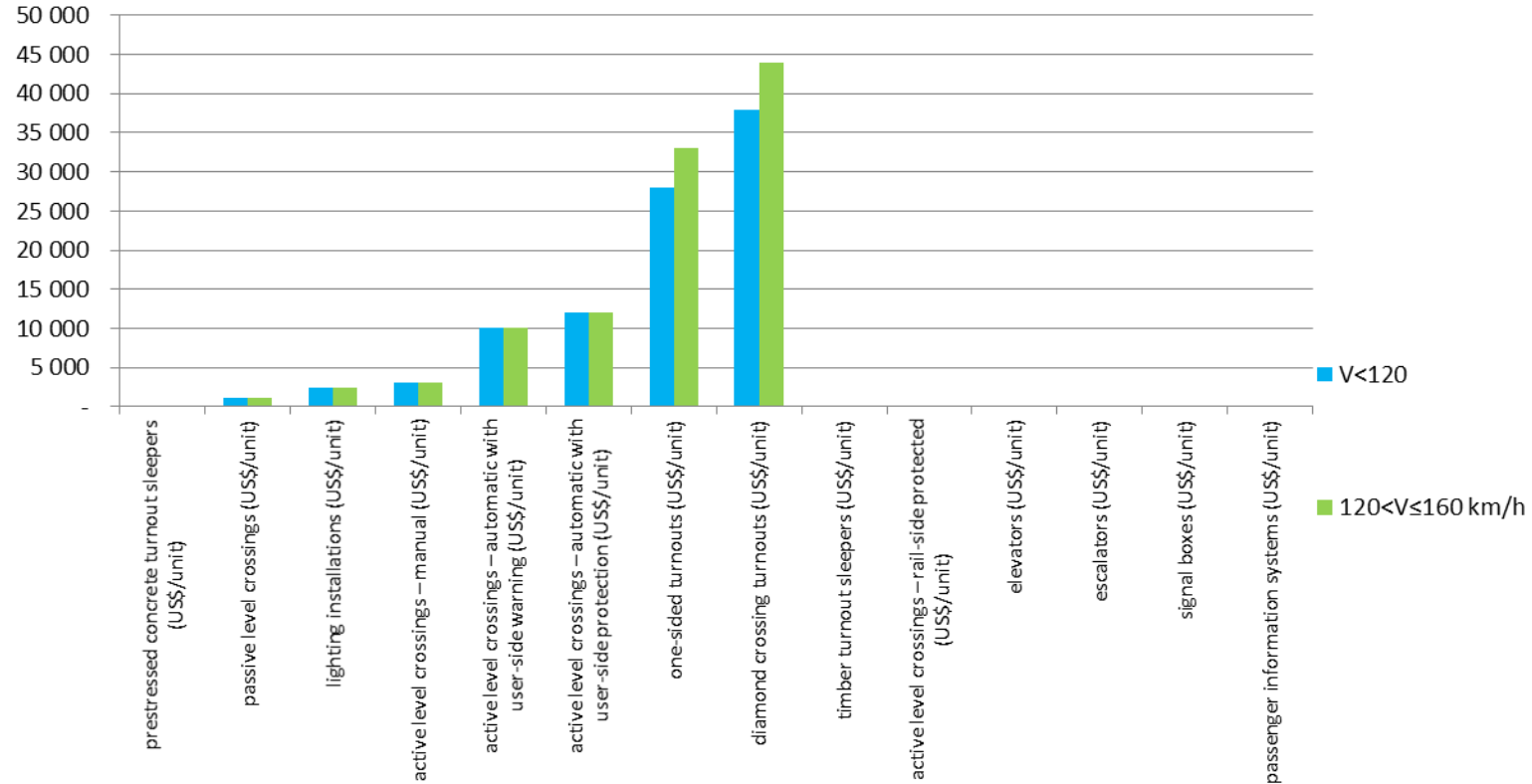
# Turkey – new construction (US\$/km)



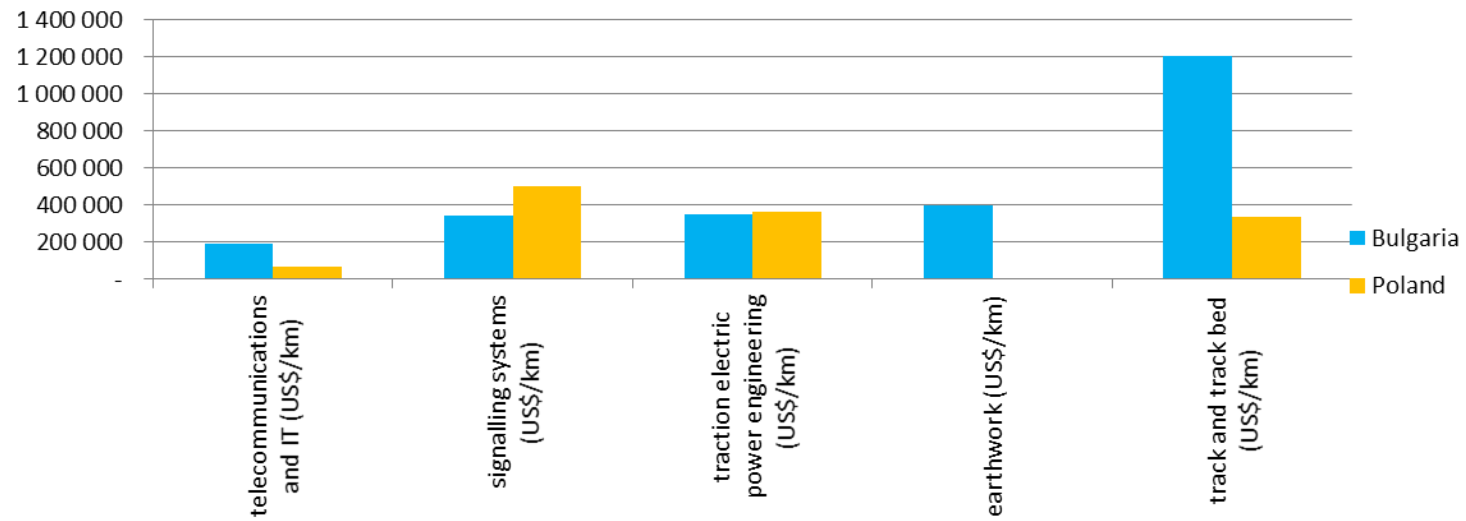
# Turkey – new construction (US\$/m or US\$/m<sup>2</sup>)



# Turkey – new construction (US\$/unit)

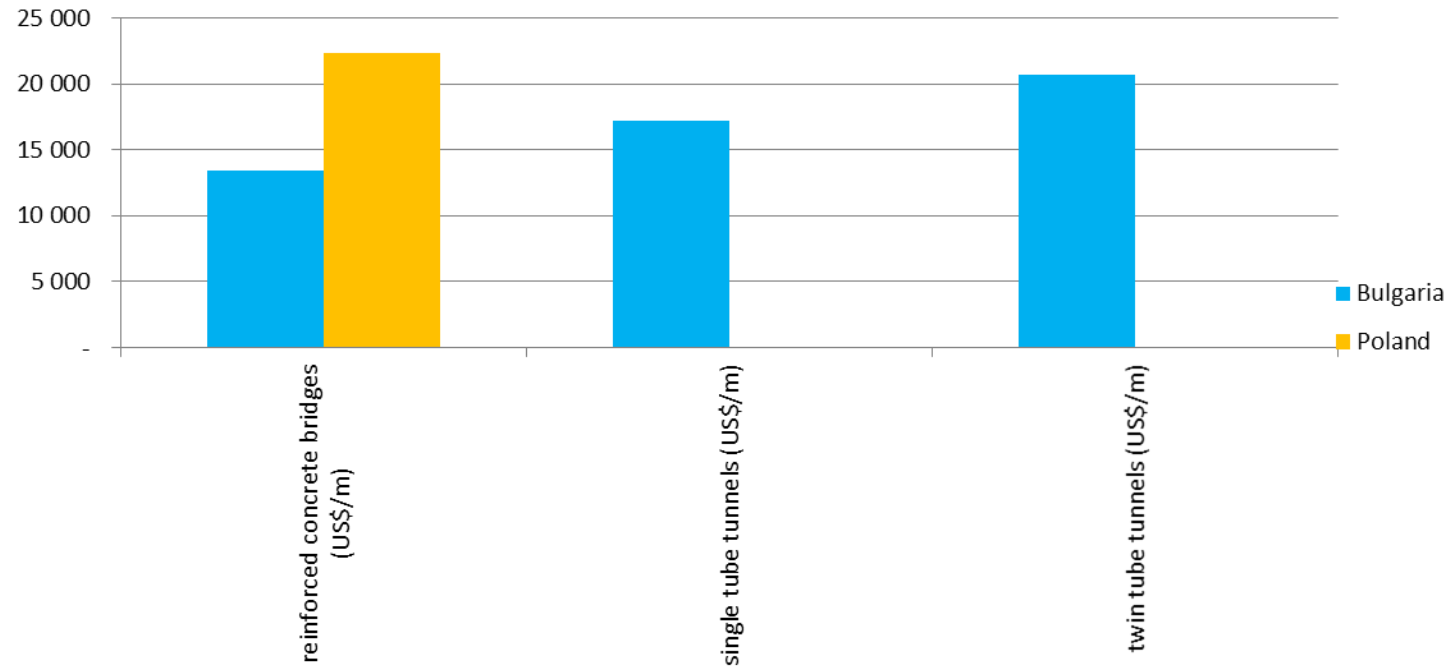


# Bulgaria, Poland – upgrade (US\$/km)

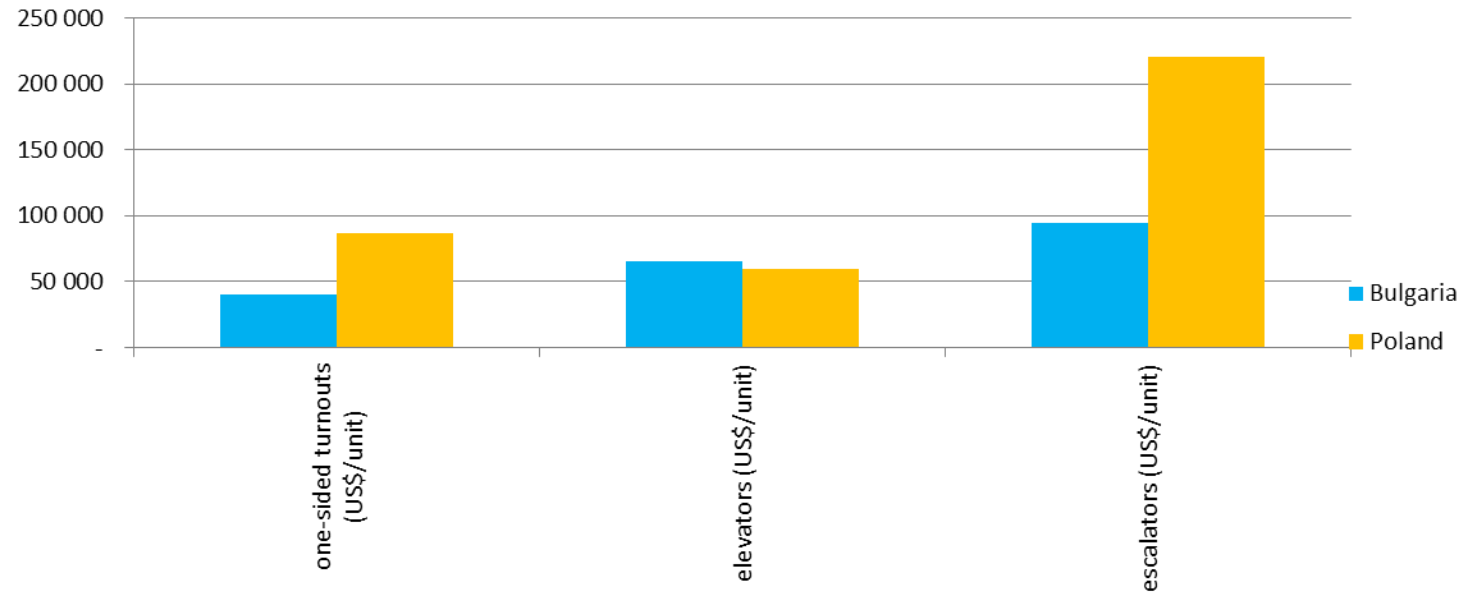




# Bulgaria, Poland – upgrade (US\$/m)

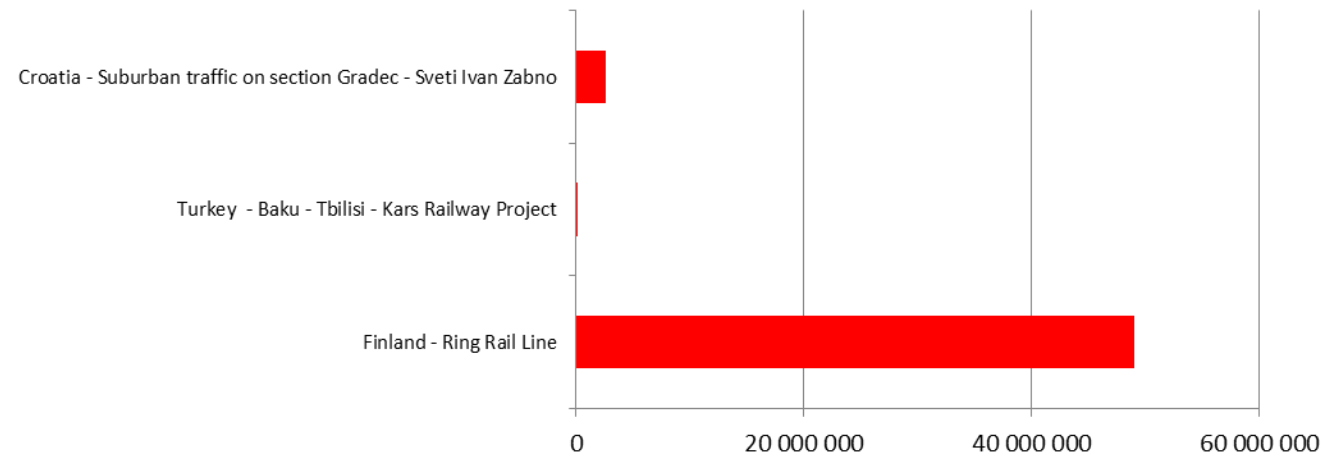


# Bulgaria, Poland – upgrade (US\$/unit)



# Croatia, Turkey, Finland – new construction, V<120

## Cost of 1km of the project in USD



# TER database Bulgaria

Project ID+type	Project description (according to the revised Master Plan Final Report)	Length (km)	Construction cost (EURx10 <sup>6</sup> )	Note
New Rehabilitation, modernization Electrification				
BG-R-1	Electrification and upgrading of Plovdiv – Svilengrad line, Phase I Krumovo – Parvomay railway section	38	159	
BG-R-1	Electrification and upgrading of Plovdiv – Svilengrad line, Phase II Parvomay – Svilengrad railway section	103	208	
BG-R-3	Electrification and upgrading of Svilengrad – Turkish border line	18	43	
BG-R-5	Phase I Rehabilitation of railway infrastructure along sections of the Plovdiv -Burgas railway line	177	244	
BG-R-5	Modernization of the railway section Septemvri – Plovdiv – part of the TransEuropean railway network	61	159	
BG-R-7	Rehabilitation of railway infrastructure along sections of the Sofia -Karlovo - Zimnitsa railway line	54	82	

# TER database Czech Republic

Project ID+type	Project description (according to the revised Master Plan Final Report)	Length (km)	Construction cost (EURx10 <sup>6</sup> )	Note
New Rehabilitation, modernization Electrification				
CZ-R-4	Bystrice nad Olsí – Český Těšín, phase II, station Český Těšín	2	62	
CZ-R-7	Beroun – Plzeň – Cheb, introduction of GSM-R system	185	21	
CZ-R-7	Modernization of line Praha – Plzeň, section Rokycany - Plzeň	282	72	
CZ-R-9	Modernization of line Praha – Česká Třebová, junction Ústí nad Orlicí	2	53	
CZ-R-10	Ústí nad Orlicí – Letohrad, modernization	13	24	
CZ-R-11	Teplice nad Bečvou – Hustopeče nad Bečvou, modernization	8	29	
CZ-R-11	Valašské Meziříčí – Vsetín – Horní Lideč, modernization	34	30	
CZ-R-12	Brno Maloměřice – Brno Židenice, modernization	3	35	
CZ-R-13	Praha Bubeneč – Praha Holešovice, modernization	3	46	

# TER database Lithuania

Project ID+type	Project description (according to the revised Master Plan Final Report)	Length (km)	Construction cost (EURx10 <sup>6</sup> )	Note
New Rehabilitation, modernization Electrification				
LT-R-5	Construction of second track on Kyviskes – Valciunai line (Vilnius station bypass)	50	61	

# TER database Poland

Project ID+type	Project description (according to the revised Master Plan Final Report)	Length (km)	Construction cost (EURx10 <sup>6</sup> )	Note
New Rehabilitation,modernization Electrification				
PL-R-6	Modernization of E30 line (Bielawa Dolna - Horka section), construction of bridge on Nysa Luzycka + electrification, phase II	1	5	
PL-R-8	Modernization of E30/CE30 line (Krakow - Rzeszow section), phase III phase I	139	700	
PL-R-10	Modernization of E59 line Wroclaw - Poznan, phase III (Czempin - Poznan section) phase I	32	80	
PL-R-11	Modernization of E59 line Wroclaw – Poznan, phase II (Wroclaw - Dolnoslaskie Voivodeship border section)	58	217	

# TER database Serbia

Project ID+type	Project description (according to the revised Master Plan Final Report)	Length (km)	Construction cost (EURx10 <sup>6</sup> )	Note
New Rehabilitation, modernization Electrification				
SR-R-1	Reconstruction of the line Beograd – Sid, section Golubinci – Ruma	18	12	
SR-R-3	Reconstruction of the single track and construction of the second track on the line Pancevacki Most - Pancevo Glavna, reconstruction of stations Krnjaca, Ovca, Pancevo bridge, construction of the new bridge over Tamis river	15	81	
SR-R-4	Reconstruction of existing track and construction of the second track with the construction of a new bridge on the Velika Morava river	10	42	
SR-R-4	Reconstruction of two sections of rail line Beograd - Nis: Sopot Kosmajski - Kovacevac and Mala Krsna - Velika Plana	48	24	
SR-R-5	Reconstruction of three sections of rail line Nis – Presevo – FYROM border: Vinarce – Dordevo, Vranjska Banja – Ristovac, Bujanovac - Bukarevac	47	33	



# TER database Slovakia

<b>Project ID+type</b>  New  Rehabilitation,modernization  Electrification	<b>Project description</b> (according to the revised Master Plan Final Report)	<b>Length (km)</b>	<b>Construction cost</b>  (EURx10 <sup>6</sup> )	<b>Note</b>
SL-R-5	Modernization of the section Belusa - Puchov	9	87	

# TER database Turkey

<b>Project ID+type</b>  New  Rehabilitation,modernization  Electrification	<b>Project description</b> (according to the revised Master Plan Final Report)	<b>Length (km)</b>	<b>Construction cost</b> (EURx10 <sup>6</sup> )	<b>Note</b>
TR-R-11	Irmak – Karabuk – Zonguldak, rehabilitation and signalling	415	220	



**PKP POLSKIE LINIE KOLEJOWE S.A.**

Zarządca narodowej sieci linii kolejowych

**Thank you for your attention**