

HIGH SPEED LINES IN THE WORLD

Updated 1st November 2013

Lines or sections of lines in which operation $V > 250$ km/h¹

1: There are some exceptions.

EUROPE

AUSTRIA

In operation:

Section	Max.Speed (km/h)	Year	Distance (km)
Vienna – St Pölten	250	2012	93
Total Austria km =			93

BELGIUM

In operation:

Section	Max.Speed (km/h)	Year	Distance (km)
Brussels – French Border (L1)	300	1997	72
Leuven – Liège (L2)	300	2002	65
Liège – German Border (L3)	260	2009	36
Antwerp – Dutch border (L4)	300	2009	36
Total km =			209
Total Belgium km =			209

FRANCE

In operation:

Section	Max.Speed (km/h)	Year	Distance (km)
LGV Paris Sud Est	300	1981 / 1983	419
LGV Atlantique	300	1989 / 1990	291
LGV Contournement Lyon	300	1992 / 1994	121
LGV Nord – Europe	300	1994 / 1996	346
LGV Interconnexion IDF	300	1994 / 1996	104
LGV Méditerranée	320	2001	259
LGV Est (First phase)	320	2007	332
(Figueres -) Frontière – Perpignan	300	2010	24
LGV Rhin – Rhône Br Est (First phase)	320	2011	140
Total km =			2 036

Under construction:

Section	Max.Speed (km/h)	Year	Distance (km)
LGV Est – Européenne (Second phase)	320	2016	122
LGV Bretagne – Pays de la Loire	320	2016	214
LGV Sud Europe Atlantique	300	2016	341
Contournement Nîmes – Montpellier	300	2017	80
Total km =			757

Planned:

Section			Max.Speed (km/h)	Year	Distance (km)
LGV Rhin	—	Rhône Br Est (Second phase)	320	2017	50
LGV Poitiers	—	Limoges	320	>2020	115
LGV Bordeaux	—	Toulouse (GPSO)	320	>2020	210
Liaison Paris	—	Normandie		>2020	200
LGV PACA				>2020	189
Interconnexion Sud IDF				>2020	18
LGV Bordeaux	—	Espagne (GPSO)		>2020	230
LGV Lyon	—	Turin		>2020	291
LGV Montpellier	—	Perpignan		>2020	193
LGV Picardie				>2020	200
LGV Rhin	—	Rhône Branche Sud	320	>2020	157
LGV Rhin	—	Rhône Branche Ouest	320	>2020	94
LGV Coeur de France (POCL)			320	>2020	430
Jonction vers aéroport de Vatry				>2020	30

Total km = 2 407
Total France km = 5 200

GERMANY

In operation:

Section			Max.Speed (km/h)	Year	Distance (km)
Fulda	—	Würzburg	280	1988	90
Hannover	—	Fulda	280	1991	248
Mannheim	—	Stuttgart	280	1991	109
Hannover (Wolfsburg)	—	Berlin	250	1998	189
Köln	—	Frankfurt	300	2002	184
Köln	—	Düren	250	2003	42
(Karlsruhe -) Rastatt	—	Offenburg	250	2004	44
Leipzig	—	Gröbers (- Erfurt)	250	2004	24
Hamburg	—	Berlin	230	2004	253
Nürnberg	—	Ingolstadt	300	2006	89
München	—	Augsburg	230	2011	62

Total km = 1 334

Under construction:

Section			Max.Speed (km/h)	Year	Distance (km)
(Leipzig/Halle -) Gröbers	—	Erfurt	300	2015	98
(Karlsruhe -) Offenburg	—	Basel	250	2015	112
Nürnberg	—	Erfurt	250	2017	218

Total km = 428

Planned:

Section				Max.Speed (km/h)	Year	Distance (km)
Frankfurt	–	Mannheim		300		18
Stuttgart	–	Ulm	– Augsburg	250		166
Hamburg/Bremen	–	Hannover		300		114
(Hannover -) Seelze	–	Minden		230		71
(Frankfurt -) Hanau	–	Fulda/Würzburg		300		126

Total km = 495
 Total Germany km = 2 257

ITALY

In operation:

Section				Max.Speed (km/h)	Year	Distance (km)
Rome	–	Florence (First section)		250	1981	150
Rome	–	Florence (Second section)		250	1984	74
Rome	–	Florence (Third section)		250	1992	24
Rome	–	Naples		300	2006	220
Turin	–	Novara		300	2006	94
Milan	–	Bologna		300	2008	182
Novara	–	Milan		300	2009	55
Florence	–	Bologna		300	2009	77
Naples	–	Salerno		300	2009	47

Total km = 923

Planned:

Section				Max.Speed (km/h)	Year	Distance (km)
Milan	–	Venice				245
Genoa	–	Milan				150

Total km = 395
 Total Italy km = 1 318

THE NETHERLANDS

In operation:

Section				Max.Speed (km/h)	Year	Distance (km)	
Schiphol	–	Rotterdam	–	Belgian Border	300	2009	120

Total Netherlands km = 120

POLAND

Planned:

Section				Max.Speed (km/h)	Year	Distance (km)	
Warsaw – Lodz	–	Wroclaw	–	Poznan	300		500
Warsaw	–	Ktowice / Krakow			300		212

Total Poland km = 712

PORTUGAL

Planned:

Section				Max.Speed (km/h)	Year	Distance (km)	
Lisboa	–	Caia (- Madrid)			350		206
Porto	–	Valença (- Vigo) first phase			250		55
Lisboa	–	Porto			300		290
Porto	–	Valença (- Vigo) second phase			250		45
Aveiro	–	Almeida (- Salamanca)			250		170
Evora	–	Faro	–	Vila Real de SA (- Huelva)	250		240

Total Portugal km = 1 006

RUSSIA

Planned:

Section				Max.Speed (km/h)	Year	Distance (km)	
Moscow	–	St. Petersburg			300		650

Total Russia km = 650

SPAIN

In operation:

Section				Max.Speed (km/h)	Year	Distance (km)	
Madrid	–	Seville		270	1992	471	
Madrid	–	Lleida		300	2003	519	
Zaragoza	–	Huesca		200	2003	79	
(Madrid -) La Sagra	–	Toledo		250	2005	21	
Córdoba	–	Antequera		300	2006	100	
Lleida	–	Camp de Tarragona		300	2006	82	
Madrid	–	Segovia	–	Valladolid	300	2007	184
Antequera	–	Málaga		300	2007	55	
Camp de Tarragona	–	Barcelona		300	2008	88	
By pass Madrid				200	2009	5	
Madrid	–	Valencia / Albacete		300	2010	432	
Figueres	–	Frontera (- Perpignan)		300	2010	20	
Ourense	–	Santiago		300	2011	88	
Barcelona	–	Figueres		300	2013	132	
Albacete	–	Alicante		300	2013	239	

Total km = 2 515

Under construction:

Section				Max.Speed (km/h)	Year	Distance (km)
(Madrid-Valencia/Alicante) - Murcia / Castellón				300		231
Vitoria	–	Bilbao	–	San Sebastián	250	175
Variante de Pajares				250		50
Bobadilla	–	Granada		250		109
La Coruña	–	Vigo		250		158
Navalmoral	–	Cáceres – Badajoz	–	Fr. Port.	300	278
Sevilla	–	Cádiz		250		152
Hellín	–	Cieza (Variante de Camarillas)		250		27
Sevilla	–	Antequera		300		128

Total km = 1 308

Planned:

Section				Max.Speed (km/h)	Year	Distance (km)
Valladolid	–	Burgos	–	Vitoria	300	211
Venta de Baños	–	León	–	Asturias		238
Madrid	–	Navalmoral de la Mata		300		191
Almería	–	Murcia				190
Valencia	–	Castellón				64
Olmedo	–	Zamora	–	Orense	300	323
Palencia	–	Santander		300		201
Zaragoza	–	Castejón	–	Logroño	250	149
Castejón	–	Pamplona		300		75
Orense	–	Vigo (vía Cerdedo)		250		60

Total km = 1 702

Total Spain km = 5 525

SWEDEN

Planned:

Section			Max.Speed (km/h)	Year	Distance (km)
Stockholm	–	Malmö / Goteborg	300		750

Total Sweden km = 750

SWITZERLAND

In operation:

Section			Max.Speed (km/h)	Year	Distance (km)
Frutigen	–	Visp (Lötschberg base tunnel)	250	2007	35

Total km = 35

Under construction:

Section			Max.Speed (km/h)	Year	Distance (km)
Erstfeld	–	Biasca (Gotthard base tunnel)	250	2017	57
Giubiasco	–	Lugano (Ceneri base tunnel)	250	2019	15

Total km = 72

Total Switzerland km = 107

UNITED KINGDOM

In operation:

Section			Max.Speed (km/h)	Year	Distance (km)
Fawkham Junction	–	Tunnel	300	2003	74
London	–	Southfleet Junction	300	2007	39

Total km = 113

Planned:

Section			Max.Speed (km/h)	Year	Distance (km)
London	–	Birmingham (HS2, first section)	360	2025	204

Total km = 204

Total United Kingdom km = 317

TOTAL KM EUROPE:

In operation = 7 378

Under construction = 2 565

Planned = 8 321

Total Europe 2025 = 18 264

ASIA

CHINA (PASSENGERS DEDICATED LINES – PDL)

In operation:

Section				Max.Speed (km/h)	Year	Distance (km)
Qinhuangdao	—	Shenyang		250	2003	404,9
Beijing	—	Tianjing		350	2008	118,0
Nanjing	—	Hefei		250	2008	148,6
Jinan	—	Qingdao		200	2009	393,0
Hefei	—	Wuhan		250	2009	331,0
Shijiazhuang	—	Taiyuan		250	2009	223,9
Wuhan	—	Guangzhou		300	2009	1 079,4
Ningbo	—	Wenzhou	— Fuzhou-Xiamen	250	2010	837,4
Zhengzhou	—	Xi'an		300	2010	523,4
Chengdu	—	Dujiangyan		200	2010	65,4
Shanghai	—	Nanjing		300	2010	323,5
Nanchang	—	Jiujiang		250	2010	118,7
Shanghai	—	Hangzhou		350	2010	147,3
Changchun	—	Jilin		250	2010	110,9
Hainan East Circle				250	2010	308,1
Guangzhou	—	Zhuhai North		200	2011	142,9
Beijing	—	Shanghai		300	2011	1 318,3
Guangzhou	—	ShenZhen (Hongkong)		250	2011	102,4
Wuhan	—	Yichang		200	2012	292,1
Hefei	—	Bengbu		300	2012	130,6
Zhengzhou	—	Wuhan		300	2012	525,6
Harbin	—	Dalian		250	2012	921,2
Beijing	—	Zhengzhou		300	2012	676,2
Longyan	—	Zhangzhou		200	2012	113,5
Nanjing	—	Hangzhou		350	2013	256
Hangzhou	—	Ningbo		350	2013	255

Total km = 9 867

Under construction:

Section			Max.Speed (km/h)	Year	Distance (km)
Guangzhou	—	Zhuhai (include Extend Line)	200		21
Tianjin	—	Qinhuangdao			278
Xiamen	—	Shenzhen	200		514
Nanjing	—	An'qing	200		258
Shijiazhuang	—	Jinan	250		323
Baoji	—	Lanzhou	250		401
Changsha	—	Kunming	250		1 158
Lanzhou	—	Urumqi	200		1 776
Heifei	—	Fuzhou	250		806
Datong	—	Xi'an	250		859
Xi'an	—	Chengdu	250		509
Wuhan	—	Xiaogan	200		65,6
Wuhan	—	Huangshi	200		96
Tianjin	—	Baoding	200		231,6
Xuzhou	—	Zhengzhou	250		361,9
Haerbin	—	Qiqihaer	250		285,5
Xi'an	—	Baoji	250		148
Shenyang	—	Dandong	250		206
Hangzhou	—	Changsha	300		452
Qingdao	—	Rongcheng	250		331,6

Total km = 9 081

Planned:

Section			Max.Speed (km/h)	Year	Distance (km)
Wanzhou	—	Chengdu			586
Chengdu	—	Guangzhou			1 373
Shangqui	—	Hangzhou			770
Kunming	—	Nanning			710
Jinzhou	—	Yingkou	200		100
Guangxi Northern Gulf			200		238

Total km = 3 777

Total China km = 22 726

TAIWAN-CHINA

In operation:

Section			Max.Speed (km/h)	Year	Distance (km)
Taipei	—	Kaohsiung	300	2007	345

Total Taiwan-China km = 345

INDIA

Planned:

Section	Max.Speed (km/h)	Year	Distance (km)
Mumbai — Amehdabad	250		495

Total India km = 495

JAPAN (SHINKANSEN SYSTEM)

In operation:

Section	Max.Speed (km/h)	Year	Distance (km)
Tokyo — Shin Osaka (Tokaido)	270	1964	515
Shin Osaka — Okayama (San-yo)	270	1972	161
Okayama — Hakata (San-yo)	300	1975	393
Omiya — Morioka (Tohoku)	320	1982	465
Omiya — Niigata (Joetsu)	240	1982	270
Ueno — Omiya (Tohoku)	110	1985	27
Tokyo — Ueno (Tohoku)	110	1991	4
Fukushima — Yamagata (Yamagata) MINI	130	1992	87
Morioka — Akita (Akita) MINI	130	1997	127
Takasaki — Nagano (Hokuriku)	260	1997	117
Yamagata — Shinjo (Yamagata) MINI	130	1999	62
Morioka — Hachinohe (Tohoku)	260	2002	97
Shin Yatsushiro — Kagoshima Chuo (Kyushu)	260	2004	127
Hachinohe — Shin Aomori (Tohoku)	260	2010	82
Hakata — Shin Yatsushiro (Kyushu)	260	2011	130

Total km = 2 664

Under construction:

Section	Max.Speed (km/h)	Year	Distance (km)
Nagano — Kanazawa (Hokuriku)	260	2015	228
Shin Aomori — Shin Hakodate (Hokkaido)	260	2016	149
Takeo Onsen — Isahaya (Kyushu)			45
Isahaya — Nagasaki (Kyushu)		2023	21
Kanazawa — Tsuruga (Hokuriku)	260	2025	125
Shin Hakodate — Sapporo (Hokkaido)	260	2035	211

Total km = 779

Planned:

Section	Max.Speed (km/h)	Year	Distance (km)
Tsuruga — Osaka (Hokuriku)			128
Shin Tosu — Takeo Onsen (Kyushu)			51

Total km = 179

Total Japan km = 3 622

SAUDI ARABIA

Under construction:

Section				Max.Speed (km/h)	Year	Distance (km)	
Medina	—	Jeddah	—	Mecca	300	2015	550

Total Saudi Arabia km = 550

SOUTH KOREA

In operation:

Section				Max.Speed (km/h)	Year	Distance (km)	
Seoul	—	Daegu			300	2004	330
Daegu	—	Pusan			300	2010	82

Total km = 412

Under construction:

Section				Max.Speed (km/h)	Year	Distance (km)	
Osong	—	Gwangju			300	2014	186

Total km = 186

Planned:

Section				Max.Speed (km/h)	Year	Distance (km)	
Gwangju	—	Mokpo			300	2017	49

Total km = 49

Total South Korea km = 647

TURKEY

In operation:

Section				Max.Speed (km/h)	Year	Distance (km)
(Ankara-)Sinkan	—	Eskisehir		250	2009	232
Polatli	—	Konya		250	2011	212
Total km =						444

Under construction:

Section				Max.Speed (km/h)	Year	Distance (km)
Eskisehir	—	Köseköy		250	2014	180
Köseköy	—	Gebze		160	2014	56
Bursa	—	Yenişehir		250	2015	75
Yerköy	—	Sivas		250	2015	292
Total km =						603

Planned:

Section				Max.Speed (km/h)	Year	Distance (km)
Kayseri kuzey geçişi				160	2013	23
Ankara	—	İzmir		250	2015	624
Bandırma	—	Bursa		250	2015	100
Yenişehir	—	Osmaneli		250	2015	30
Sivas	—	Erzincan		250	2015	235
Nusaybin	—	Cizre	— Habur hattı	160	2016	135
Mürşitpınar	—	Urfa		160	2016	63
Ankara	—	Kayseri		250		175
Halkalı	—	Bulgaria Border		250		230
Gebze	—	İstanbul				43
Gaziantep	—	Çobanbey	— Halep			100
Total km =						1 758
Total Turkey km =						2 805

TOTAL KM ASIA:

In operation = 13 732

Under construction = 11 199

Planned = 6 258

Total Asia 2025 = 31 190

OTHER HIGH SPEED SYSTEMS

MOROCCO

Under construction:

Section	Max.Speed (km/h)	Year	Distance (km)
Tanger – Kenitra	300	2015	200
Total km =			200

Planned:

Section	Max.Speed (km/h)	Year	Distance (km)
Settat – Marrakech	300		480
Total km =			480
Total Morocco km =			680

BRAZIL

Planned:

Section	Max.Speed (km/h)	Year	Distance (km)
Rio de Janeiro – Sao Paulo – Campinas	300		511
Total Brazil km =			511

USA

In operation:

Section	Max.Speed (km/h)	Year	Distance (km)
North East Corridor ([Boston –] NY – W)	240		362
Total km =			362

Planned:

Section	Max.Speed (km/h)	Year	Distance (km)
Fresno – Bakersfield	300	2021	483
Sacramento / San F – Fresno		>2025	147
Bakersfield – Los Angeles	300	>2025	147
Total km =			777
Total USA km =			1 139

TOTAL KM OTHER COUNTRIES:

In operation =	362
Under construction =	200
Planned =	1 768
Total Other Countries 2025 =	2 330

TOTAL KM WORLD:

In operation =	21 472
Under construction =	13 964
Planned =	16 347
Total Other Countries 2025 =	51 784