

HIGH SPEED LINES IN THE WORLD

Updated 14 June 2009

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

EUROPE

BELGIUM

In operation:

Brussels – French Border	300	1997	72
Leuven – Liège	300	2002	65
Liège – German Border	260	2009	36
			Total km = 173

Under construction:

Antwerp – Dutch border	300	2009	36
			Total km = 36

FRANCE

In operation:

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	320	2007	332
			Total km = 1872

Under construction:

(Figueres -) Frontière – Perpignan	300	2009	24
Haut-Bugey (amélioration LC)		2009	65
Contournement Nîmes – Montpellier	300	2012	70
LGV Dijon – Mulhouse	320	2012	140
			Total km = 299

Planned:

LGV Sud Europe Atlantique S		2013	120
LGV Bretagne – Pays de la Loire		2013	188
LGV Est – Européenne (Second phase)		2014 / 2015	100

¹ There are some exceptions.

LGV Poitiers – Limoges	2015	115
LGV Sud Europe Atlantique N	2016	180
LGV Bordeaux – Toulouse	2016	230
LGV Rhin – Rhône Br Est (Second phase)	2015 / 2020	48
LGV PACA	2020	200
Interconnexion Sud IDF	2020	40
LGV Bordeaux – Espagne	2020	230
LGV Lyon – Turin	2020	150
LGV Montpellier – Perpignan	2022	150
LGV Picardie	2022	250
LGV Rhin – Rhône Branche S	2022	100
LGV Rhin – Rhône Branche Ouest	2022	85
LGV Paris – Lyon bis	2025	430
		Total km = 2616

GERMANY

In operation:

Fulda – Würzburg	280	1988	90
Hannover – Fulda	280	1991 / 1994	248
Mannheim – Stuttgart	280	1985 / 1991	109
Hannover (Wolfsburg) – Berlin	250	1998	189
Köln – Frankfurt	300	2002 / 2004	197
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
			Total km = 1285

Under construction:

München – Augsburg	230	2010	62
(Leipzig/Halle -) Gröbers – Erfurt	300	2015	98
Nürnberg – Erfurt	250	2017	218
			Total km = 378

Planned:

(Karlsruhe -) Offenburg – Basel	250		112
Frankfurt – Mannheim	300		81
Stuttgart – Ulm – Augsburg	250		166
Hamburg/Bremen – Hannover	300		114
(Hannover -) Seelze – Minden	230		71
(Frankfurt -) Hanau – Fulda/Würzburg	300		126

Total km = 670

ITALY

In operation:

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

Total km = 744

Under construction:

Novara – Milan	300	2009	55
Florence – Bologna	300	2009	77

Total km = 132

Planned:

Milan – Venice			245
Genoa – Milan			150

Total km = 395

THE NETHERLANDS

Under construction:

Schiphol – Rotterdam– Belgian Border	300	2009	120
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POLAND

Planned:

Warsaw – Lodz – Wroclaw – Poznan	300	2015	500
Warsaw – Ktowice / Krakow	300	2015	212

Total km = 712

PORTUGAL

Planned:

Lisboa – Caia (- Madrid)	350	2013	206
Porto – Valença (- Vigo) first phase	250	2013	55
Lisboa – Porto	300	2015	290
Porto – Valença (- Vigo) second phase	250		45
Aveiro – Almeida (- Salamanca)	250		170

Evora – Faro – Vila Real de SA (- Huelva) 250

240

Total km = 1006

RUSSIA

Planned:

Moscow – St. Petersburg 300 650

SPAIN

In operation:

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	179
Antequera – Málaga	300	2007	55
Camp de Tarragona – Barcelona	300	2008	88
By pass Madrid	200	2009	5

Total km = 1599

Under construction:

Figueres – Frontera (- Perpignan)	300	2009	20
Barcelona – Figueres	300	2010 / 2012	132
Madrid-Valencia /Alicante / Murcia	300	2010 / 2012	902
Vitoria – Bilbao – San Sebastián	250	2012	175
Variante de Pajares	250	2012	50
Ourense – Santiago	300	2012	88
Bobadilla – Granada	250	2012	109
La Coruña – Vigo	250	2012	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 = 2219

Planned:

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	2012	323
Palencia – Santander	300		201
Zaragoza – Castejón – Logroño	250		149
Castejón – Pamplona	300		75
Orense – Vigo (vía Cerdedo)	250		60
			Total km = 1702

SWEDEN

Planned:

Stockholm – Malmö / Goteborg	300		750
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SWITZERLAND

In operation:

Frutigen – Visp (Lötschberg base tunnel)	250	2007	35
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Under construction:

Erstfeld – Biasca (Gotthard base tunnel)	250	2017	57
Giubiasco – Lugano (Ceneri base tunnel)	250	2019	15
			Total km = 72

UNITED KINGDOM

In operation:

Fawkham Junction – Tunnel	300	2003	74
London – Southfleet Junction	300	2007	39
			Total km = 113

TOTAL KM EUROPE:

In operation = 5821
Under construction = 3256
Planned = 8501
Total Europe 2025 = 17578

ASIA

CHINA

In operation:

Jinan – Qingdao	200	2008	362
Beijing – Tianjing	350	2008	120
Nanjing – Hefei	250	2008	166
Hefei – Wuhan	200	2008	356
Shijiazhuang – Taiyuan	200	2009	190

Total km = 1194

Under construction:

Zhengzhou – Xi'an	350	2009	458
Wuhan – Guangzhou	350	2009	968
Ningbo – Wenzhou– Fuzhou	250	2009	562
Fuzhou – Xiamen	200	2009	275
Guangzhou – ShenZhen(Xianggang)	350	2010	104
Nanchang – Jiujiang	200	2010	92
Changchun – Jilin	200	2010	96
Guangzhou – Zhuhai (include Extend Line)	200	2010 ²	142
Hainan east circle	200	2010	308
Chengdu – Dujiangyan	200	2010	72
Shanghai – Nanjing	300	2010	300
Wuhan – Yichang	300	2011	293
Beijing – Shanghai	350	2011	1318
Tianjin – Qinhuangdao	350	2011	261
Nanjing – Hangzhou	350	2011	249
Shanghai – Hangzhou– Ningbo	300	2011	300
Hefei – Bengbu	300	2011	131
Mianyang – Chengdu– Leshan	250	2012	316
Xiamen – Shenzhen	200	2012	502
Beijing – Wuhan	350	2012	1122
Haerbin – Dalian	350	2012	904
Nanjing – An'qing	200	2012	258

Total km = 9031

Planned:

Tianjin – Yujiabu	300	2010	45
Wuhan – Xiaogan	200	2011	55
Wuhan – Huangshi	250	2011	84
Tianjin – Bazhou– Baoding	200	2012	145
Xuzhou – Zhengzhou	300	2012	343

² Extend Line will complete in 2012.

Jinzhou – Yingkou	200	2012	100
Haerbin – Qiqihaer	250	2012	281
Xi’an – Baoji	300	2012	150
Shenyang – Dandong	200	2012	230
Shijiazhuang – Hengshui (section of Taiyuan – Qingdao)	300	2012	100
Hangzhou – Changsha	300	2012	880
Qingdao – Rongcheng	200	2012	250
Guangxi Northern Gulf	200	2012	238
			Total km = 2901

TAIWAN

In operation:

Taipei – Kaohsiung	300	2007	345
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INDIA

Planned:

Mumbai – Amehdabad	250		495
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IRAN

Planned:

Tehran – Isfahan	250		475
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JAPAN

In operation:

Tokyo – Osaka (Tokaido)	270	1964	515
Osaka – Okayama (San-yo)	270	1972	161
Okayama – Hakata (San-yo)	300	1975	393
Omiya – Morioka (Tohoku)	275	1982	465
Omiya – Niigata (Joetsu)	240	1982	270
Ueno – Omiya	110	1985	27
Tokyo – Ueno	110	1991	4
[Fukushima – Yamagata (Yamagata)	130	1992	MINI 87]
[Morioka – Akita (Akita)	130	1997	MINI 127]
Takasaki – Nagano (Hokuriku)	260	1997	117
[Yamagata – Shinjo (Yamagata)	130	1999	MINI 62]
Morioka – Hachinohe (Tohoku)	260	2002	97
Yatsuhiro – Kagoshima Chuo (Kyushu)	260	2004	127

Total km = 2452

Under construction:

Hachinohe – Shin Aomori (Tohoku)	2011	82
Hakata – Shin Yatsuhiro (Kyushu)	2011	130
Nagano – Kanazawa (Hokuriku)	2015	229
Shin Aomori – Shin Hakodate (Hokkaido)	2016	149
		Total km = 590

Planned:

Shin Hakodate – Sapporo (Hokkaido)		211
Kanazawa – Osaka (Hokuriku)		254
Hakata – Nagasaki (Kyushu)		118
		Total km = 583

SAUDI ARABIA

Planned:

Medina – Jeddah – Mecca	300	2015	550
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SOUTH KOREA

In operation:

Seoul – Daegu	300	2004	330
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Under construction:

Daegu – Pusan	300		82
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TURKEY

In operation:

Ankara-Eskisehir	250	2009	235
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Under construction:

Eskisehir-İstanbul	250	2011	298
Ankara-Konya	250	2011	212

Total km = 510

Planned:

Ankara-Sivas	250		460
Ankara-Kayseri	250		175
Ankara-İzmir	250		624
Bandırma-Bursa-Ayazma-Osmaneli	250		190
Halkalı-Bulgaria Border	250		230

Total km = 1.679

TOTAL KM ASIA:

In operation = 4556
Under construction = 10213
Planned = 6683
Total Asia 2025 = 21452

OTHER HIGH SPEED SYSTEMS

MOROCCO

Planned:

Tanger – Marrakech	300	2015	680
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ARGENTINA

Planned:

Buenos Aires – Rosario	250	2020	315
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BRAZIL

Planned:

Rio de Janeiro – Sao Paulo	300	2025	500
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USA

In operation:

North East Corridor ([Boston –] NY – W)	240		362
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Planned:

Los Angeles – Sacramento	300	2025	900
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TOTAL KM OTHER COUNTRIES:

In operation = 362

Planned = 2395

Total other countries 2025 = 2757

TOTAL KM WORLD:

In operation = 10739

Under construction = 13469

Planned = 17579

Total World 2025 = 41787

KM OF HIGH SPEED LINES IN THE WORLD				
	In operation	Under construction	Planned	Total country
Europe				
Belgium	173	36	0	209
France	1872	299	2616	4787
Germany	1285	378	670	2333
Italy	744	132	395	1271
The Netherlands	0	120	0	120
Poland	0	0	712	712
Portugal	0	0	1006	1006
Rusia	0	0	650	650
Spain	1599	2219	1702	5520
Sweden	0	0	750	750
Switzerland	35	72	0	107
United Kingdom	113	0	0	113
Total Europe	5821	3256	8501	17578
Asia				
China	1194	9031	2901	13126
Taiwan	345	0	0	345
India	0	0	495	495
Iran	0	0	475	475
Japan	2452	590	583	3625
Saudi Arabia	0	0	550	550
South Korea	330	82	0	412
Turkey	235	510	1679	2424
Total Asia	4556	10213	6683	21452
Other countries				
Morocco	0	0	680	680
Argentina	0	0	315	315
Brazil	0	0	500	500
USA	362	0	900	1262
Total other countries	362	0	2395	2757
Total World	10739	13469	17579	41787

Updated 20090614

High speed rail systems in the world

In operation : France
Germany
Italy
Spain
Belgium
United Kingdom

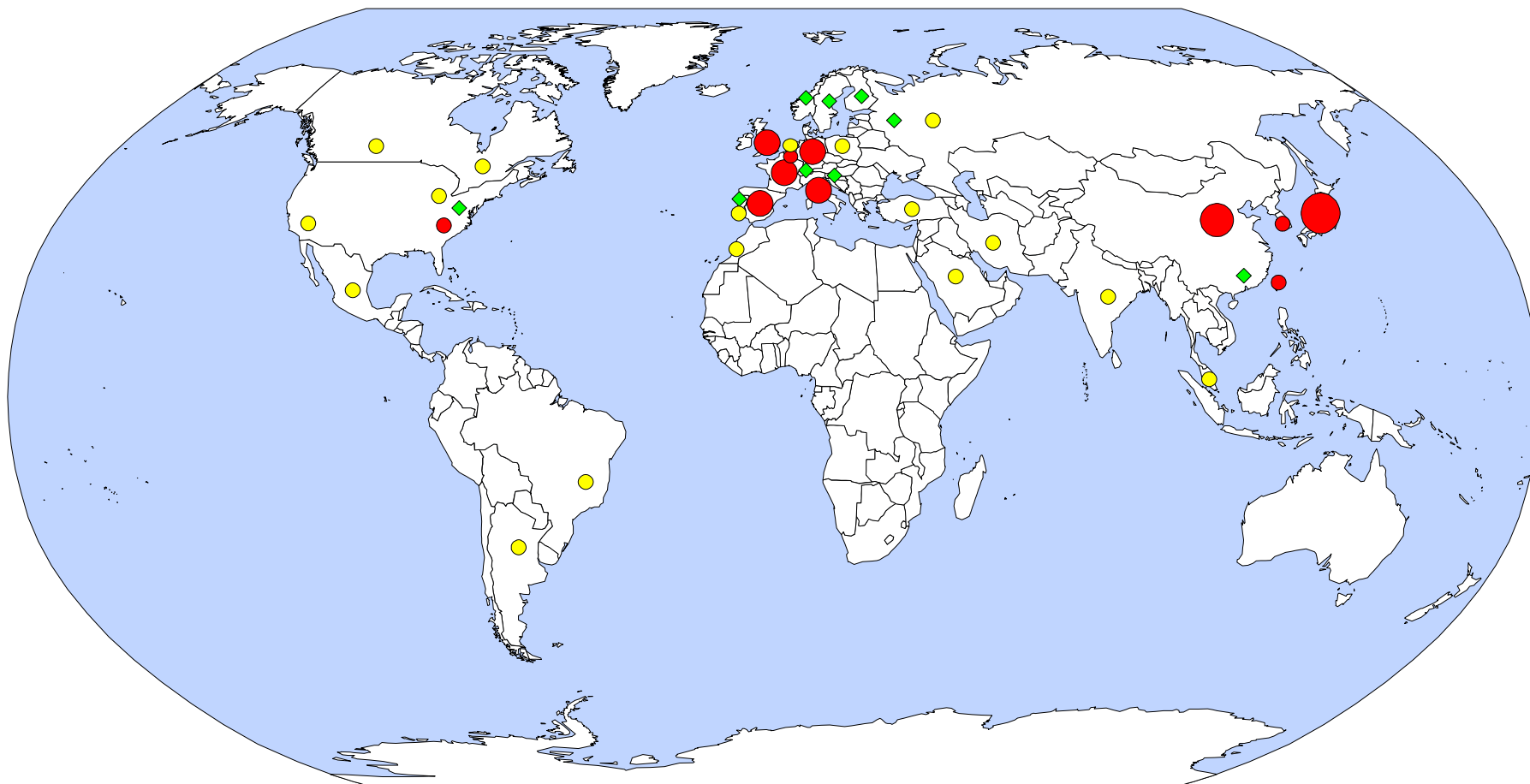
Japan
Korea
China
Taiwan
Turkey

USA

Construct.: The Netherlands

In project: Poland
Portugal
Russia
Morocco
India
Iran
Saudi Arabia
Argentina
Brazil
Indonesia
Canada
Mexico...

High speed rail systems around the world

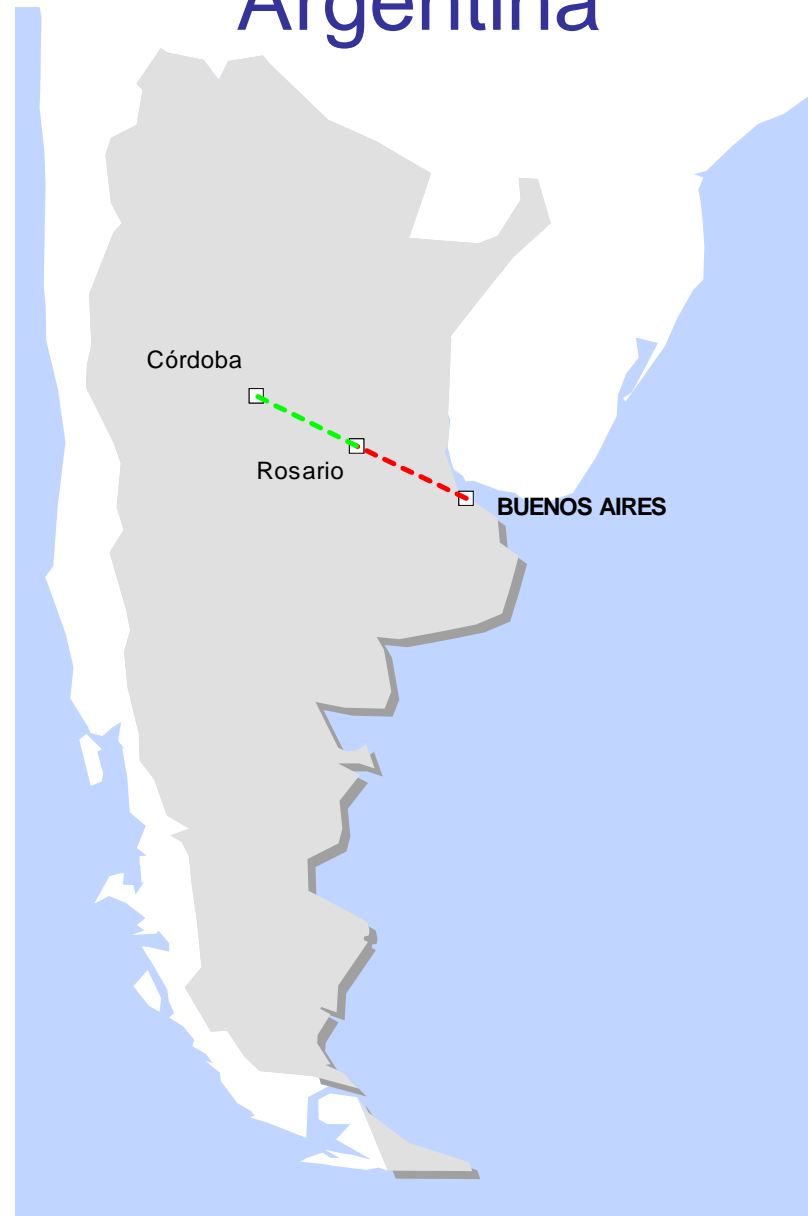


 $V \geq 250$ km/h in operation

 $V \leq 200$ km/h in operation

 High speed in project

Argentina



Brazil



Canada



China



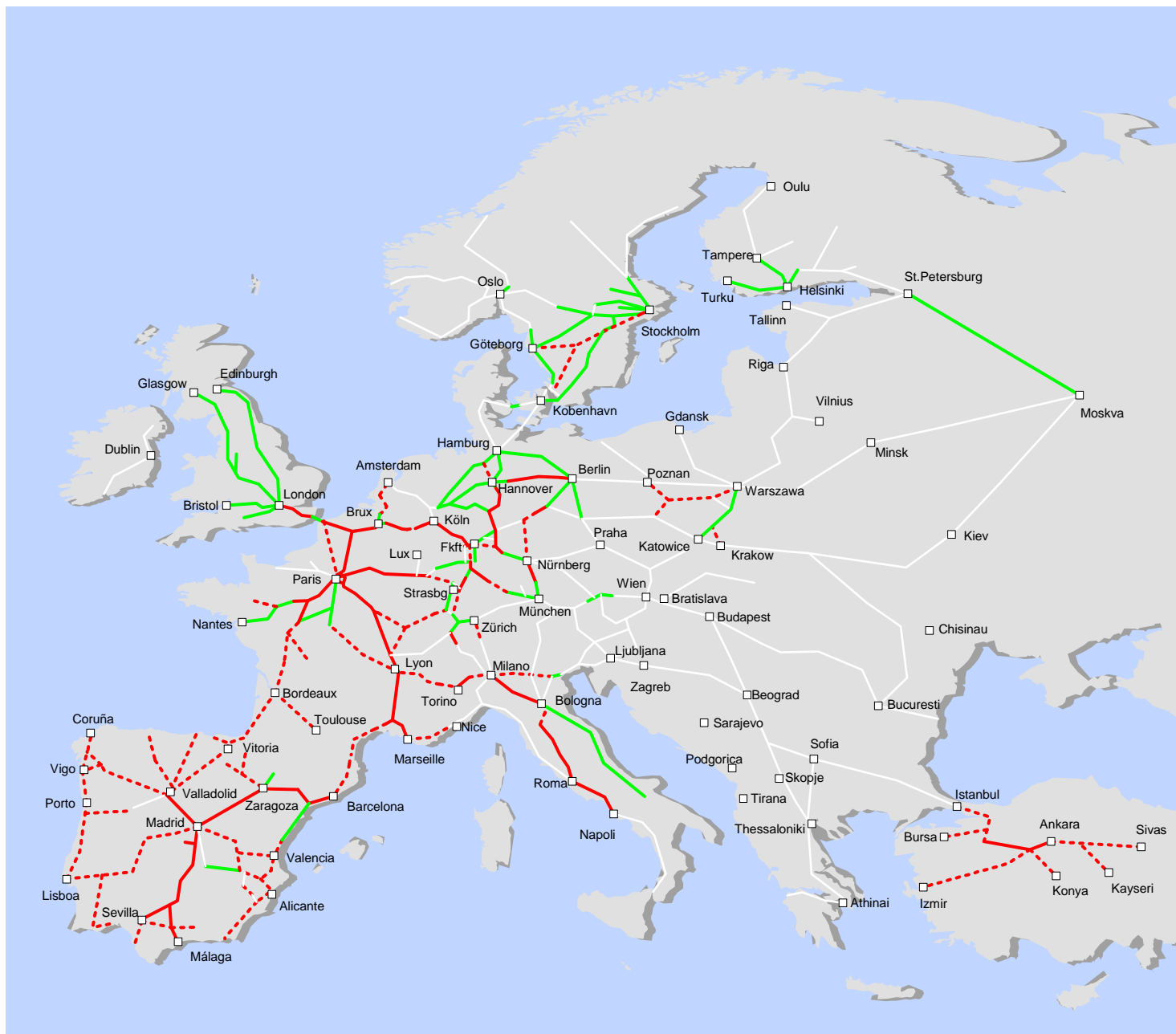
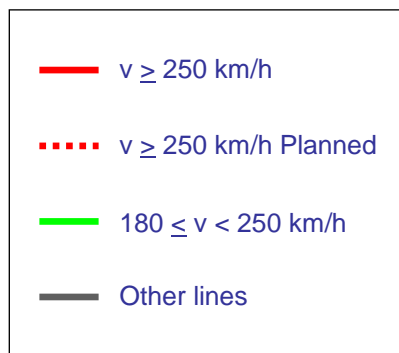
IB/OG/HT

Taiwan



European HS Network

Situation as at 06.2009



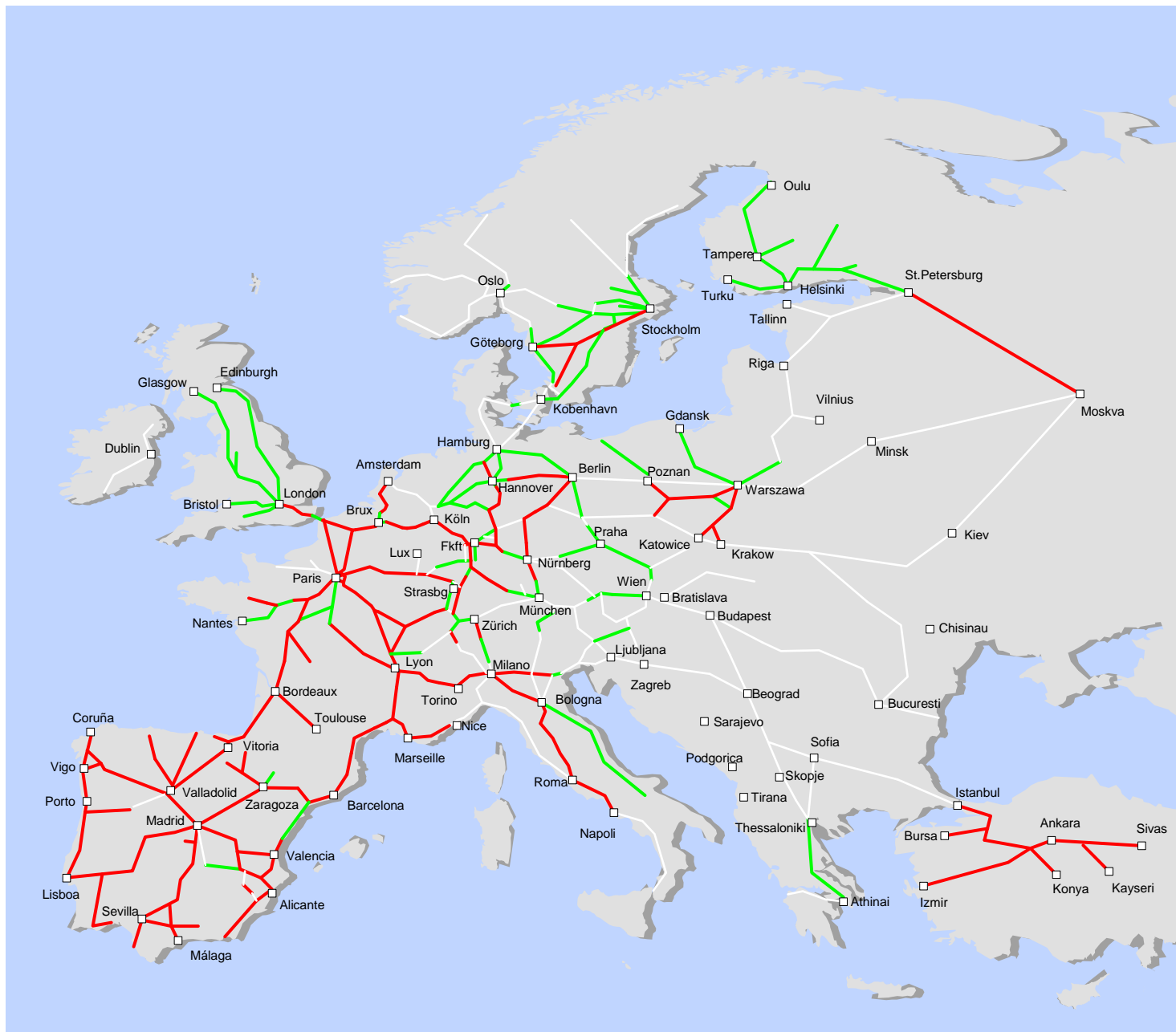
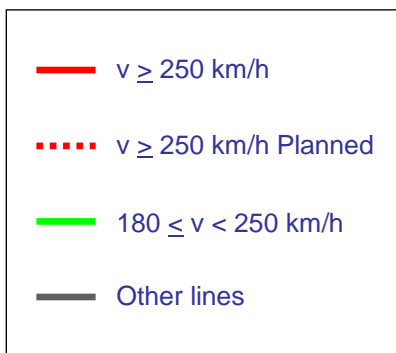
Information given by the Railways

UIC - High-Speed
 Updated 14.03.2009
 OG/IB



European HS Network

Forecasting 2025



Information given by the Railways

UIC - High-Speed
Updated 14.03.2009
OG/IB



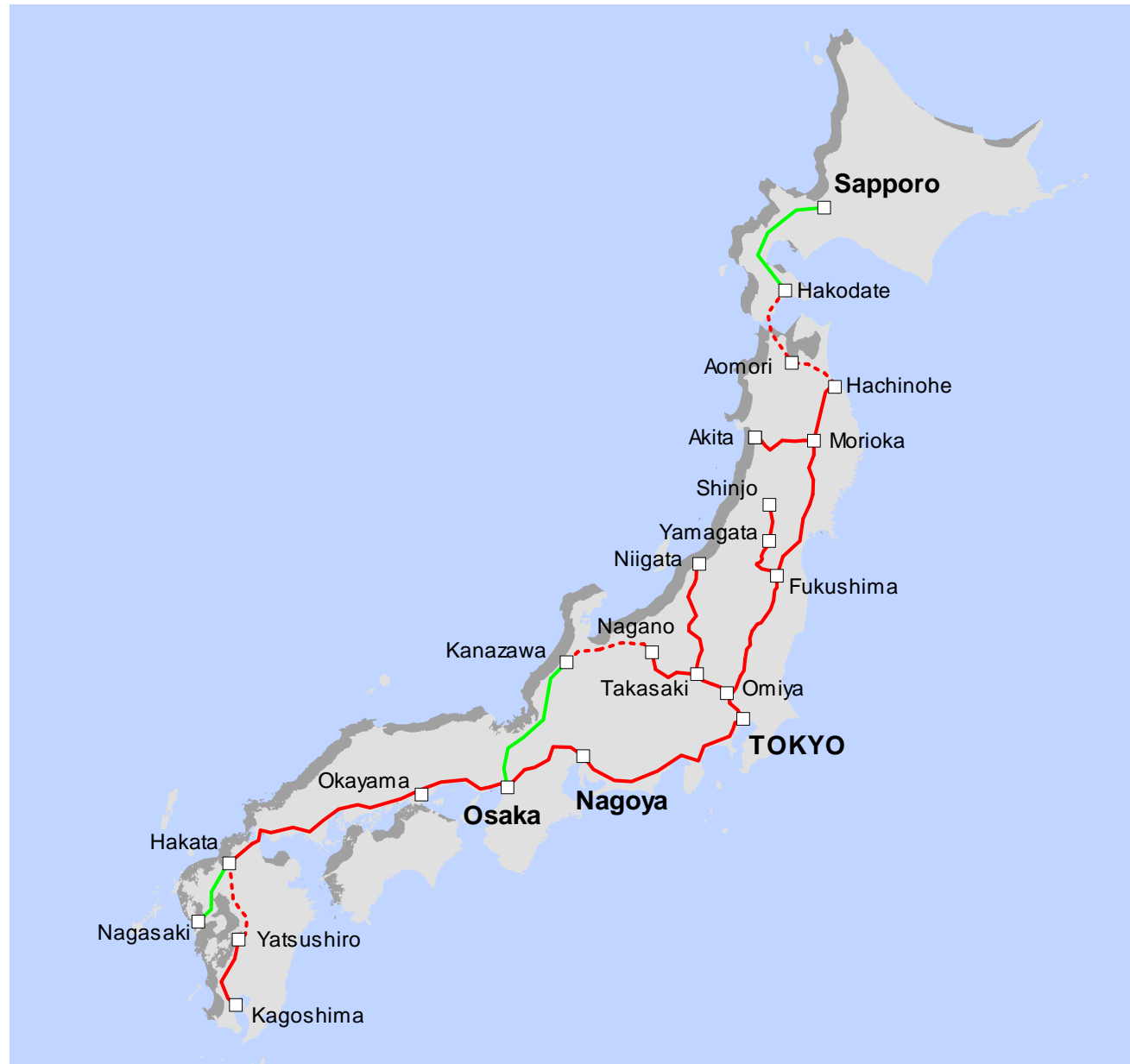
India



Iran



Japan



South Korea



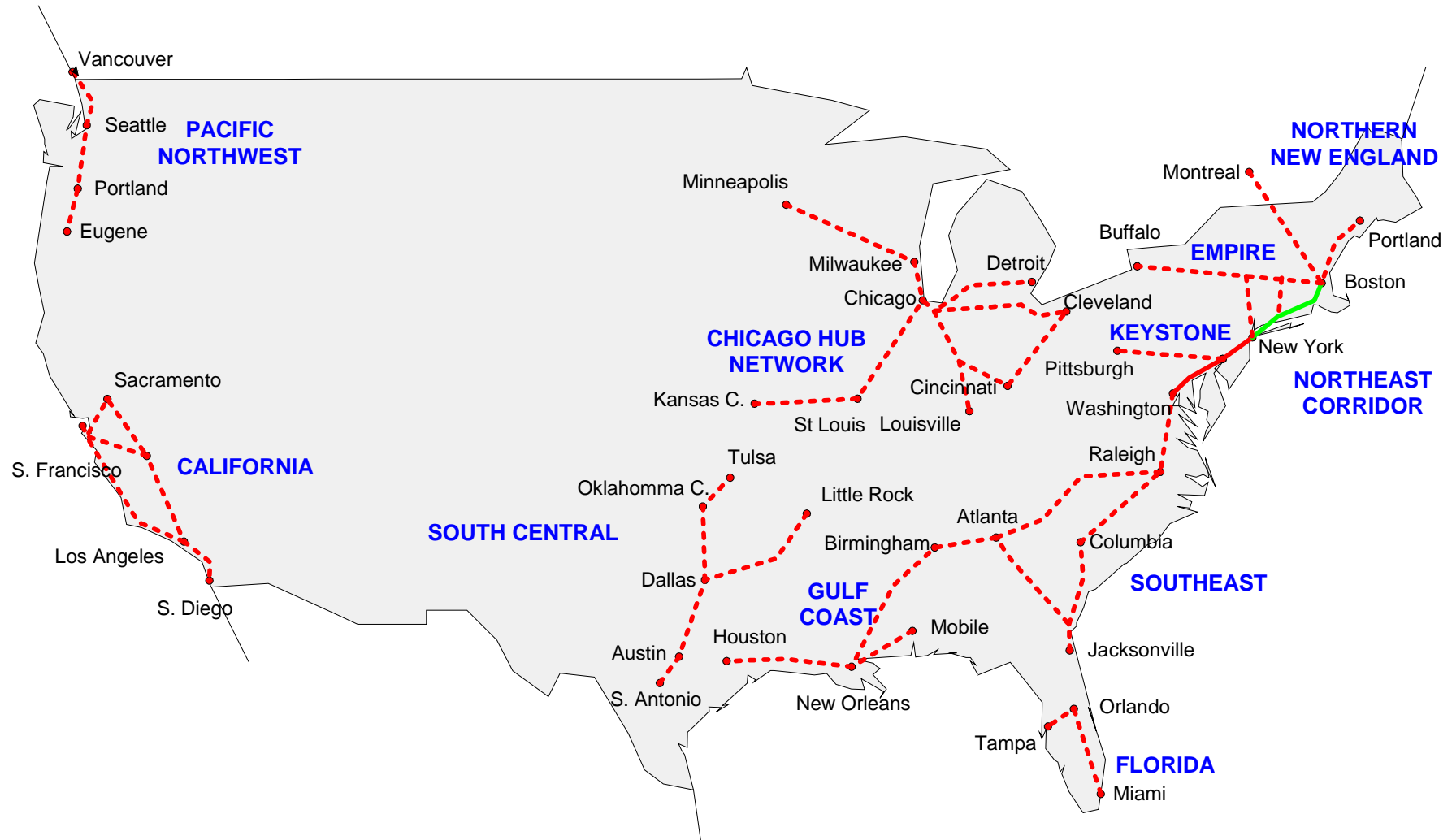
Morocco



Saudi Arabia



USA



Expected evolution of the world HS network

