

Developments in China Railways

Global Markets Discussion

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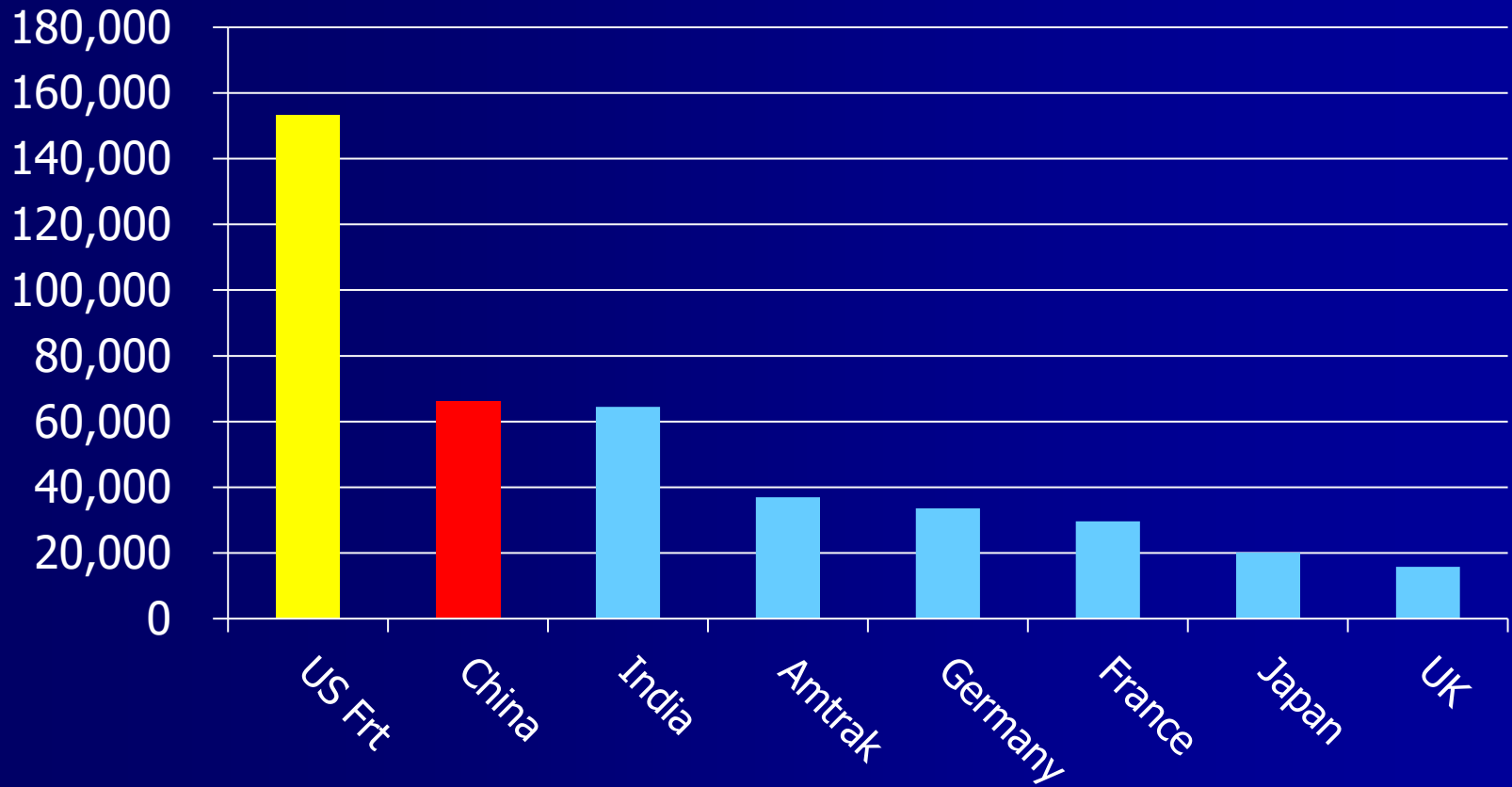
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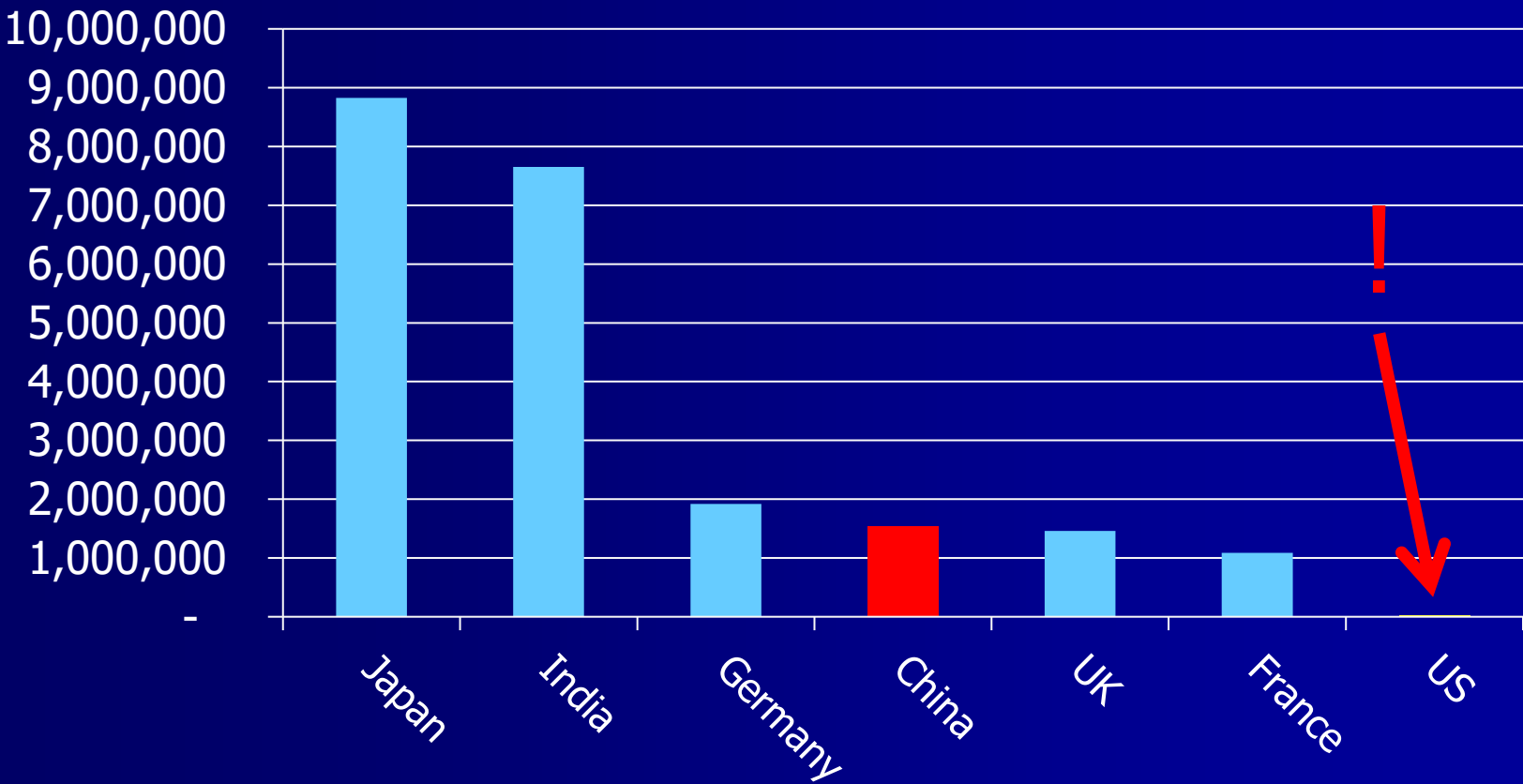
China Railways in Perspective

- In process of change: MOR to China Railways
- Immense railway – one of world's largest by most measures
- Very intensely and efficiently operated, actually carries more freight than passengers
- Traffic growing rapidly – just like the rest of the economy

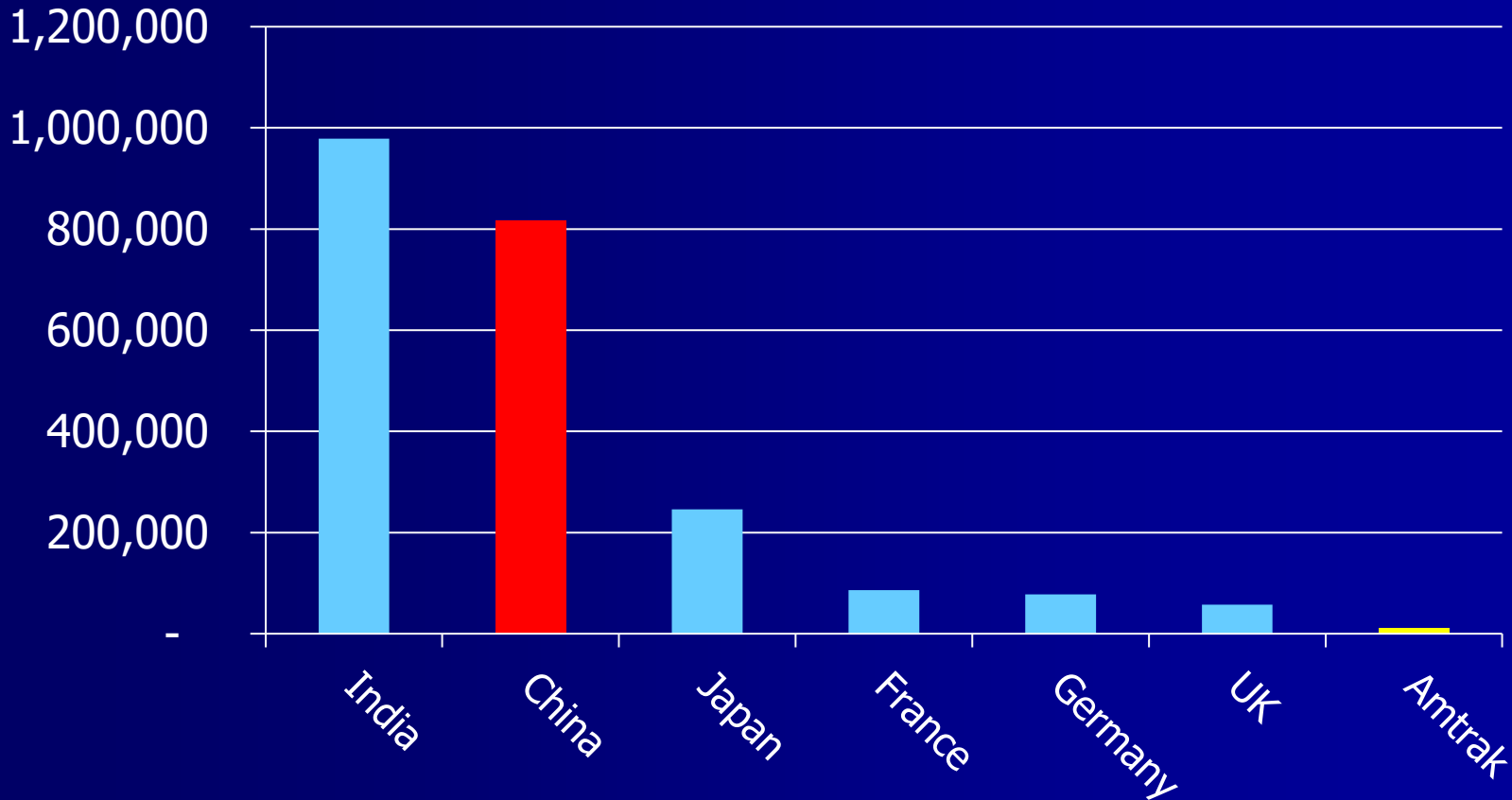
Total Km of Line



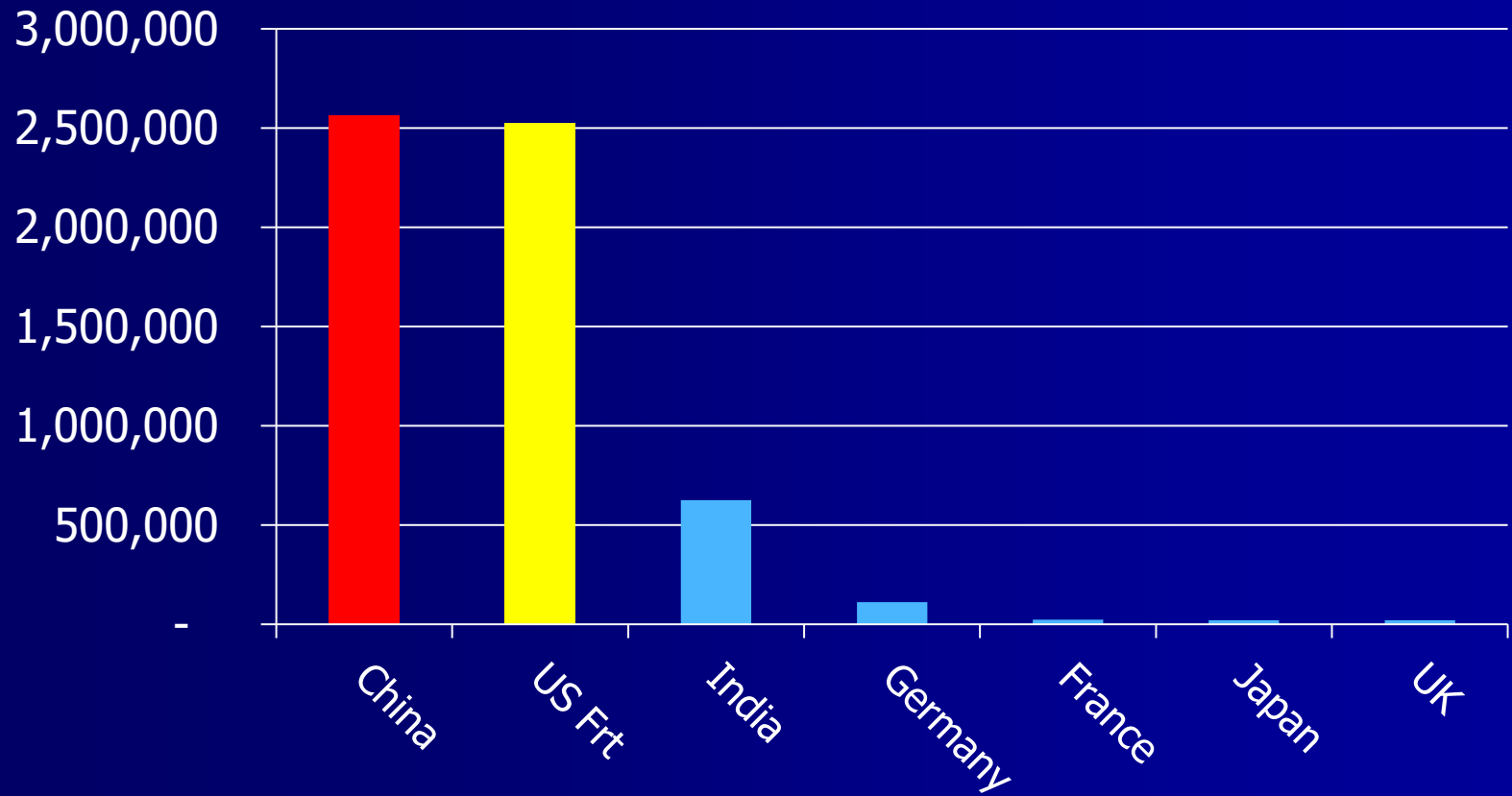
Passengers (000)



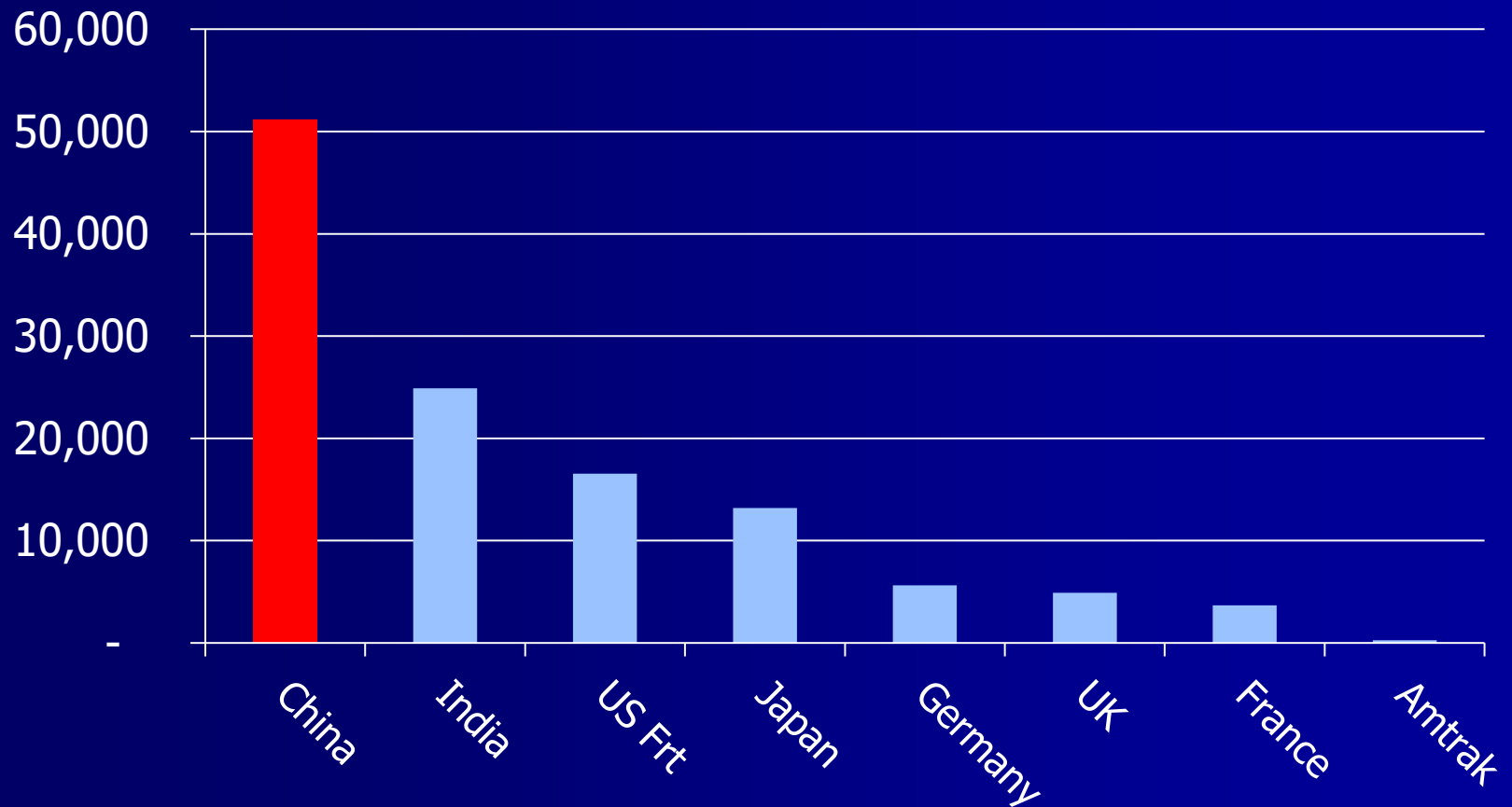
Passenger-Km (000,000)



Freight Tonne-Km (000,000)

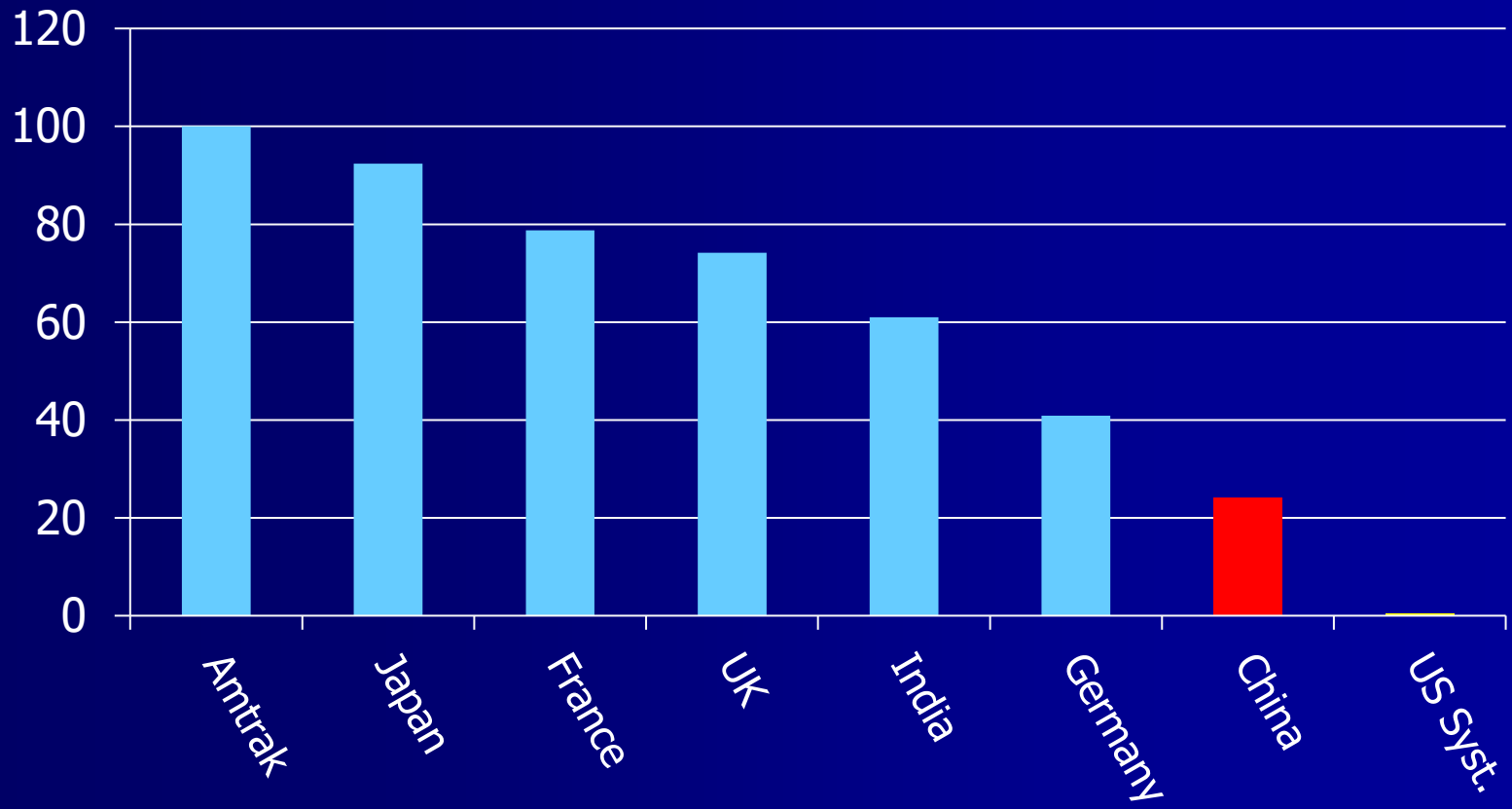


Traffic Density (000 TU/Km)*

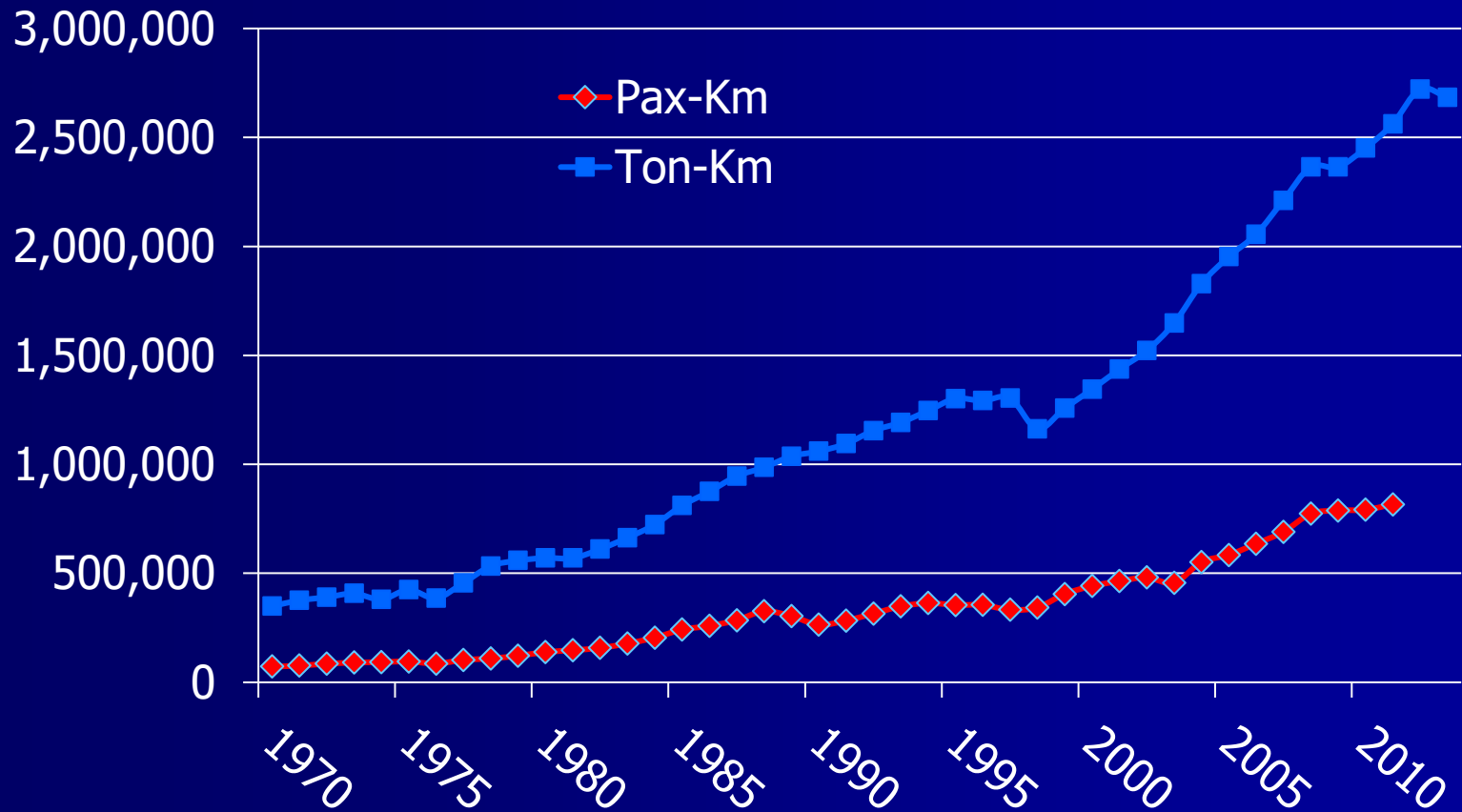


* Traffic Units (TU) is the sum of tonne-km plus pax-km

Percent of Traffic (TU) That is Passengers



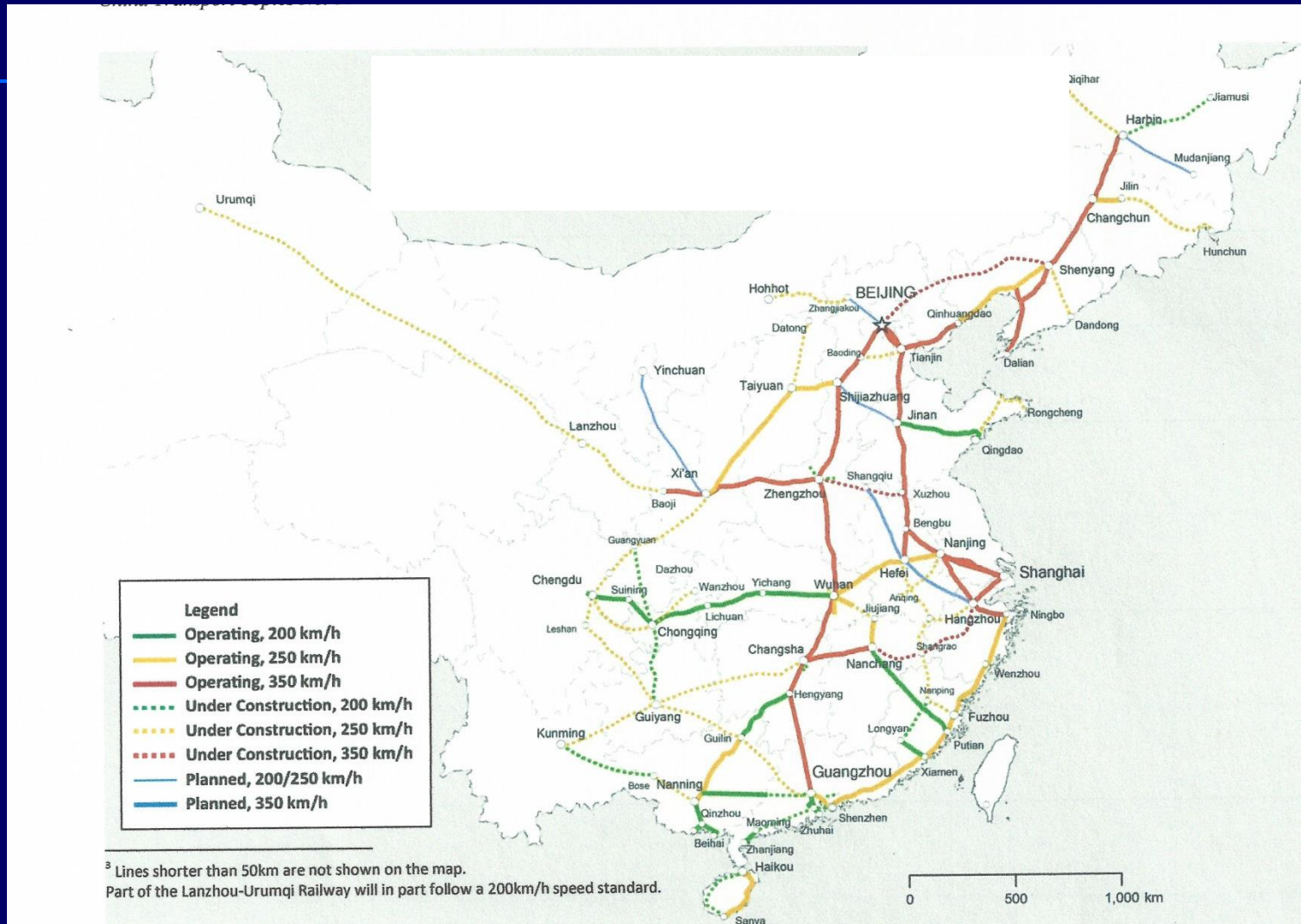
Rail Traffic Growth in China has Been Rapid



High-Speed Rail in China

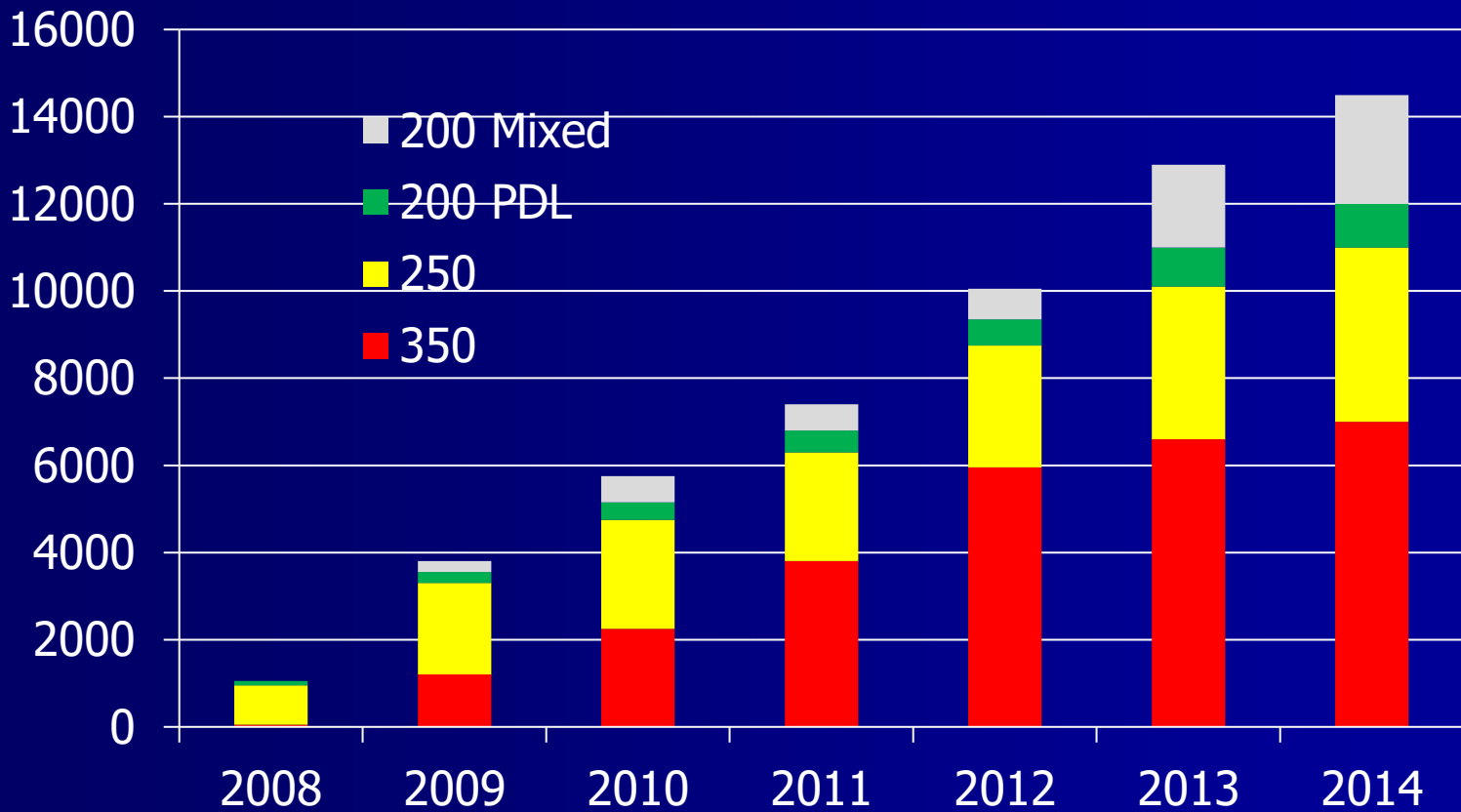
- Want to build **both** passenger and freight capacity: China **can't** follow western highway/air model.
- Four levels of passenger lines: HSR (250 km/hr and 350 km/hr), PDLs (200 km/hr) and mixed lines
- Aggressive goal, implementation is incredibly rapid. Total cost **>\$330 billion**.
- Demand expanding rapidly (HSR pax already > all other HSR systems)
- BUT the financial burden may be unsustainable:
 - Planning was “visionary,” not based on evaluation
 - System built mostly with borrowing that CR will not be able to repay (debt may be >8x Total revenue)
 - Early results are mixed and following links less promising than existing because of regional development objectives that railway should not finance

Chinese HSR System Current and Planned



Growth in HSR Lines in China

Eventual Goal 45,000 Km, 16,000 HSR

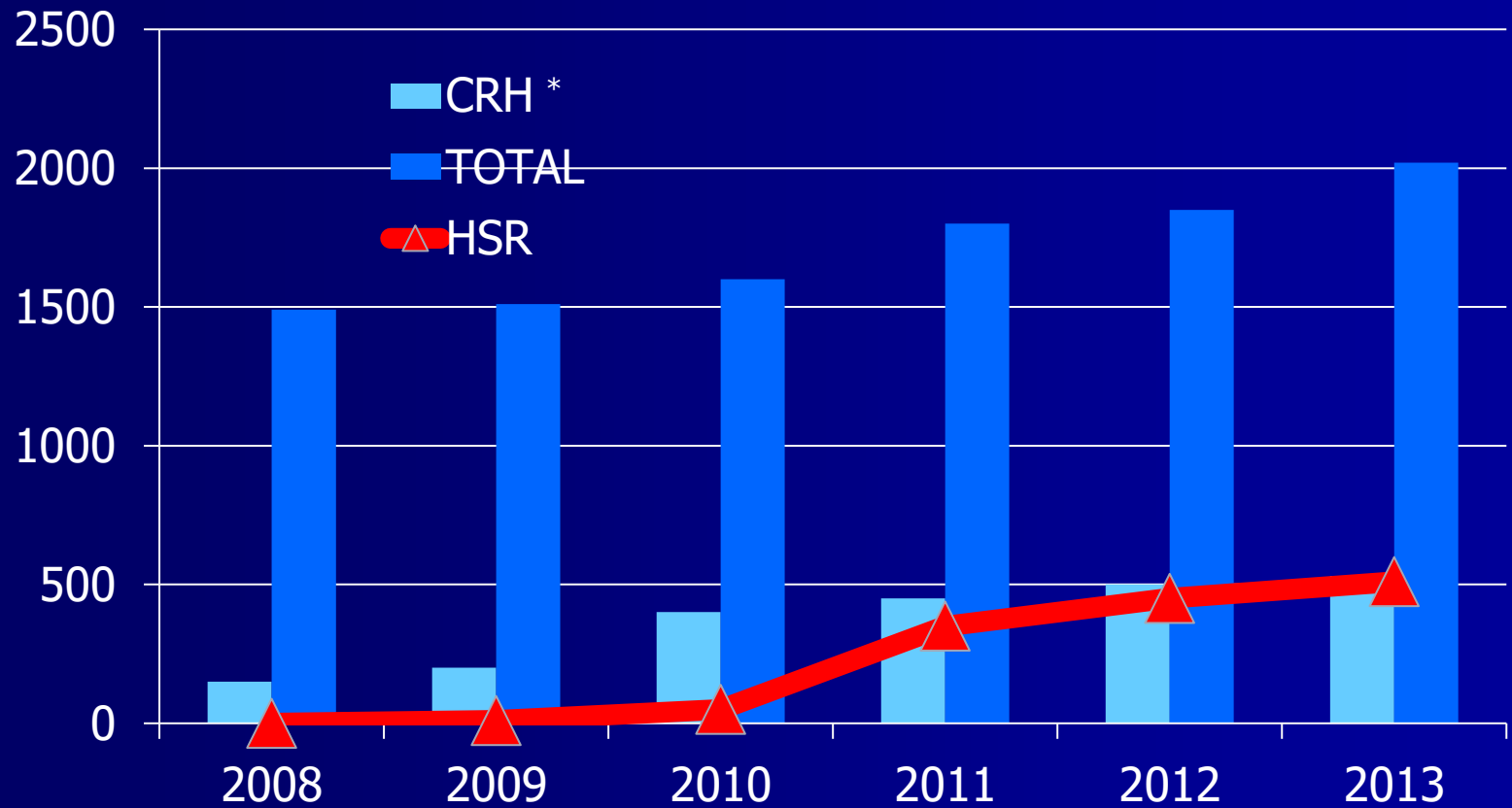


Adapted from World Bank Dec 2014

Note: Spain, 2515; Japan, 2388; France, 2036

Passenger Demand Growing Fast in China

(million total passengers)



* China Rail -High Speed (CRH) is traffic on PDLs, HSR is all ≥ 250 Km/hr

Adapted from World Bank Dec 2014

Potential Roles for U.S. Involvement

- China, especially railways not easy place to do business: government (political) involvement is deep and legal environment is weak and undefined
- Strong preference for local sources
- High-Tech components
- Business systems and commercial know-how (HSR is not yet a business)
- Leasing or financing
- Don't forget Urban Rail/Mass Transit: more diffuse but probably easier to do business. 19 systems (2400 Km now); 31 more (up to 5000 Km) in future

Sources:

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