Current and Future
China’s Railway Development

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I. Strategic Thinking of Railway Development

1. For sustainable development of China’s economy

China’s development is facing a hard task for energy saving and emission reducing.

-- railway is a green transport mode for the energy saving and environment friendly.

-- land using: ½ comparing with highway,

  1/10 with highway on unit traffic

-- energy saving: railway took 1/5 of energy consumed by the transport industry and carried ½ whole traffic volume.

-- environment: emission and air pollution caused by rail much less than that of road / air transport, esp. electrification.

-- other social cost lower such as safety, traffic jam
2. For harmonious development in China

- 5400km from eastern land to western, 5200km from northern to southern, the average distance among the provincial capital cities is 1500km.
- Main resource bases in western parts and main production industry bases in eastern or coast region.
- For implementing the national strategies such as Western Region Development, Economic Rise of Central China, Renaissance of the Old Industry Bases in the Northeast China, Taking the Lead of Modernization in Eastern China,
- Expand railway network can keep harmonious development among regions and make the different regions closer from timing and space.
3. For optimizing transport system

Railway development is much behind and still a bottleneck of economic development.

-- per sq km: 81.2 Km/10,000 sq.km, which is 42% of India, 15% of average level of developed countries.

-- per capita: 6 cm. per capita, about same as India, 10% of developed countries.

-- the traffic density of 6 major trunk railway lines is three times above average level of whole network.

-- request satisfaction ratio for freight less 35%, Some transport have to be taken by road which uneconomic.

-- logistic cost is about 20% of GDP, comparing with 10% of that in USA and Germany, 6.5% in Japan, transport cost is over ½ of logistic cost in China.
4. To cope with international financial crisis

- To speed up railway development can stimulate the economic growth and make a good infrastructure foundation for future development

  -- USA, Europe in beginning of last century, Japan in 1960’s

  -- China’s highway development in later 1990s Asian Financial Crisis. Express highway from 8700km reached to 54000km during 1998-2007.

  -- According the estimate, 600 billion RMB (about $90 billion) of railway capital investment could create 6 million jobs, consume 20 million tons of steel, 120 million tons of cement.
Ⅱ. Mid & Long-term Railway Network Plan  
( 2004 1st, 2008 Rev.)

--- Target for 2020

The railway length shall exceed 120,000km with double track and electrified account respectively for over 50% and 60%;

- Main busy trunk corridors realize separation of passenger and freight traffic;
- Transport capacity shall meet the needs of economic and social development;
- Main technical equipment shall reach or get close to international advanced level.
Major Focus

1. Expand Rapid Passenger Railway Network

Rapid Passenger Railway Network consists of passenger-dedicated lines, intercity express and fast passenger-freight mixed traffic lines. The revised Plan involves a total route length of over 50,000km, incl. over 1,600km PDLs.
Intercity passenger lines in the economically developed and densely populated regions, i.e. Bohai Bay Ring region, Yangtze River Delta, Pearl River Delta, Changsha-Zhuzhou-Xiangtan megalopolis, Chengdu-Chongqing megalopolis, megalopolis of Central China Plains, Wuhan metropolitan area, central Shaanxi town cluster, town cluster of the west coast of Taiwan Strait, etc.
Expand the scale of western railway network, improve the structure of central and eastern railway network. 41,000 km of new railways is planned to be built.
As for coal out-bound bases, improve the coal corridors, accelerate upgrading the existing railways such as Datong - Qinhuangdao line, and newly constructing coal corridors from the “Sanxi” area to coast ports and inland areas of central-south and eastern China. The traffic capacity of coal corridors should be over 2.3 bn tons.
4. Upgrading of the Existing Railways

Building double track of existing line is 19,000km, and the electrification of the existing line is 25,000km.
III. Implementation of Railway Network Plan

• Formulated the 11 Five year Plan (2006-2010) and the annual plans for railway development based on the Mid & Long term Network Plan.

• By the end of 2008, the operation length is 79,500km. 36.1% of double track 28,700km, 33.1% of electrified 26,300km

• Over 30000km of new railway projects was approved during 2003-2008

• By the end of 2008, 23000km new railways are under construction

• Capital investment in 2009 is 600 billion RMB($ 90 billion), 337 billion in 2008, 178 billion RMB in 2007 and 154 billion in 2006
• 70 new railway projects (total investment over 1 trillion RMB and 7000km) were started in 2008, including 1300km of Beijing-Shanghai 350km/h railway.
• 70 new projects is planned to be started in 2009
• 1718 km of new lines put in operation in 2008, including 120km of Beijing –Tianjin 350km/h high speed railway and other 4 PDLs.
• Cost 6 billion RMB of Beijing South Station put in use. 234 stations is under construction.
• After the 6 round of speed-acceleration projects on existing line and the completion of new railway projects,
  160km/h: over 16000km (extended)
  200km/h: 6415km (extended)
  350km/h: 185km (extended)
• The railway financing system based on the principle of “government taking the leading role, diversified investment and market oriented”. The Joint Ventures are the major modes for new railway projects. By the end of 2008, 300 billion RMB committed from outside of MOR.

• Major financing channels:
  -- Railway Construction Fund;
  -- Contribution from local governments. Cooperate agreements between Ministry of Railways and 31 provincial governments
  -- The treasure bond and budget from central government
  -- Strategic investors such as power plants, coal mine, ports, insurance groups, ether public or private
  -- Dedicated Construction Fund from operation revenue
  -- Restructuring railway assets to IPO
  -- Issue Railway Construction Bond
  -- Bank lending from domestic and abroad
By 2012,

---- Railway length is expected to reach 110,000km, with double track and electrification respectively accounting for 50%.

---- PDLs, to be 10,000km. The PDL network of “four vertical and four horizontal corridors” will be primarily completed, with separated passenger and freight traffic realized on busy trunk lines.

---- An advanced railway network primarily shaped and railway as a bottleneck for economic development will be relieved.
IV. Some Thoughts from Implementation

- A Clear Vision
- A Good Plan.
- An Efficient Implement Mechanism
- A Creative Financing System.
Thanks!

谢谢！