In the digitalized world today, the growing population and urbanization put ever greater demands on transportation. How can we cope with these challenges while keeping our products environmentally friendly with lower emission to help against global warming and environment deterioration? At Siemens, we have efficient, integrated and green transportation solutions to answer all the questions. Powered by over a century’s expertise, worldwide experience and cutting-edge technology, we offer products and systems that could realize the most efficient and environment-friendly transportation with optimized management and passenger experience.

For over 140 years, Siemens has been a reliable and close partner in the Chinese transportation industry. I am confident that the cooperation between Siemens Mobility and our Chinese partners will continue to develop and deepen. With the new brand claim “Ingenuity for life”, we will stand firm with our partners to explore new cooperation opportunities, to satisfy our customers’ most demanding needs and contribute even more products and solutions to China’s fast developing transportation industry.

Executive Vice President of Siemens Ltd., China  
Country Division Lead of Siemens Mobility Division  
Lead Country China  
Frank Hagemeier

As a reliable, close and long-term partner of China’s transportation industry, Siemens is devoted to the most efficient, safe and environmentally friendly way of transporting passenger and freight. Siemens provides forward-looking, green and sustainable integrated transportation solutions and products. With the most cutting-edge digitalization technology, Siemens integrate all transportation systems into a comprehensive network. Siemens Mobility portfolio covers Mainline Transport, Intercity Transport, and Mass Transit as well as road traffic, providing propulsion system, network control system, bogies, etc. for rolling stock, and a full range of products and solutions for rail automation, rail electrification and road traffic. Siemens also provides customer services that cover its entire portfolio, including maintenance, overhaul, spare parts, upgrade and refurbishment, as well as technical support.

Siemens is committed to strengthening cooperation with local partners and jointly exploring the Chinese high-speed, intercity and tram market as well as the overseas rail market. In 2015, Siemens signed Comprehensive Cooperation Framework Agreement with the city of Shenyang, Liaoning province, and a MoU with the city of Haikou, Hainan province, both with transportation as the focus for future cooperation. In September, 2015, the new joint venture Tianjin Zongxi Traction Motor Ltd. was established together with long-term partner Beijing Zongheng Electro-Mechanical Technology Development Co., to deepen strategic cooperation between the two sides. In February 2016, Siemens inked a MoU on cooperation with China Railway aiming to further strengthen cooperation in technology, third-party markets and training. In April, Siemens signed a Letter of Intent with Shanghai Railway Bureau to jointly explore the cooperation opportunities in High Speed EMU maintenance. With Beijing Jiaotong University, Siemens signed a MoU in 2015 to establish partnership in high-speed rail, urban transport and green transport.

Thinking Mobility Further
Siemens advanced and cost-effective high-speed trains could provide top-notch, convenient and comfortable travel experience. Combining hundreds of years’ expertise in rail automation and innovative technology, Siemens signaling products and system could ensure reliable, safe and punctual operation of high speed railway. High-level project management and execution as well as comprehensive and high-quality after sales service could satisfy all the requirements of the customer.

In China, Siemens contributed greatly to the new high-speed railway network demonstration project and a key project of China dedicated passenger line Jing Jin DPL and the world’s longest railway electrification from Harbin to Dalian. Siemens CRH3 platform traction system is serving lines such as Jing Jin, Jing Guang, Jing Hu and Ha Da. Siemens also provides overhaul service and technical support for the HXD1 and HXD1B locomotives.

**Main business:**
- Traction and train control system for high speed EMU
- Bogies for high speed trains and locomotives
- Electric locomotives
- Rail automation for mainline
- Products and system for main line contact lines
- Services such as maintenance, overhaul, spare parts, technical support, and refurbishment

**Intercity Railway**

Designed specifically for the increasing demand for intercity posed by China’s growing number of regional economic zones, Siemens provides core components and services for regional and intercity trains with a new speed range together with Chinese partner.

**Main business:**
- Traction and train control system for regional and intercity high-speed trains
- Bogies for regional and intercity trains and locomotives
- Electric locomotives
- Rail automation products and system
- Products and system for contact lines
- Services such as maintenance, overhaul, spare parts, technical support, and refurbishment

**Mainline Railway**

Siemens offers efficient, safe and environment-friendly rolling stock and solutions for mass transit systems in cities, including metro rail cars, tramcars and light rail cars and the Arival and Cityval APM system for cities and airport. Siemens signaling system, DC traction power supply and contact line products and systems guarantees the safe and reliable operation of mass transit. Siemens also provides refurbishment services and participates in export business together with Chinese partners.

**Main business:**
- Metro rail cars
- Tramcars and light rail cars
- Rubber-tire AGT system
- Mass Transit automation system
- Components
- Refurbishment
- Products and systems of DC traction power supply and contact line for mass transit
- Export

**Mass Transit**

Siemens has rich experience in worldwide metropolis applications. Since the delivery of the very first adaptive traffic control system in Beijing in 1989, Siemens urban traffic control system, traffic management system and parking solution are helping many Chinese cities to improve their road traffic efficiency. For example, Siemens provided the UTC system for Wuhan, which is its biggest Urban Traffic Control turnkey project in China. Siemens also provided the tailor-made Zhuhai Integrated Traffic Information and Service Platform in its very first Traffic Management System turkey project in China. Siemens Parking Solution is serving over a dozen cities including Beijing, Shanghai and Shenzhen.

**Main business:**
- Traffic Signal Control System
- TMS platform for cities
- Parking solution
- E-Bus charging solution

**Road traffic**

As a world leading intelligent traffic solution provider, Siemens offers efficient and integrated mobility solutions. In China, Siemens has rich experience in worldwide metropolis applications. Since the delivery of the very first adaptive traffic control system in Beijing in 1989, Siemens urban traffic control system, traffic management system and parking solution are helping many Chinese cities to improve their road traffic efficiency. For example, Siemens provided the UTC system for Wuhan, which is its biggest Urban Traffic Control turnkey project in China. Siemens also provided the tailor-made Zhuhai Integrated Traffic Information and Service Platform in its very first Traffic Management System turkey project in China. Siemens Parking Solution is serving over a dozen cities including Beijing, Shanghai and Shenzhen.
**Long-term and reliable partnership**

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**CRH3 platform high-speed EMU traction system**
- Provides traction components for Chinese CRH3, CRH380B/BL, CRH380B-LTT, CRH380BL Sleeper, CIT400, CRH35G, etc.
- Improved efficiency and mobility for Jing-Jin Line, Jing-Guang Line, Jing-Hu Line, Ha-Da Line etc.
- Designed for easier maintenance and meets the latest safety requirements
- Regenerative braking system for greater energy efficiency (energy is fed back into the electricity supply system)
- Local competence: Manufacturing, After Sales Service(15 depots), Overhaul, Engineering

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**Beijing Metro Line 10 - the busiest metro line in Beijing with the biggest passenger capacity in China**
- 57km, 45 stations, 116 trains
- Automatic Train Control System with CBTC
- Moving block, shortest headways of 2 mins, Max. 98 trains in operation during peak hours
- ATP, ATO, ATS, DCS, Interlocking
- The world’s longest all-underground loop line, also Beijing’s busiest metro line
- The biggest passenger capacity of China’s metro lines, with up to 2 million passengers daily

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**First full NVC 100% low floor tram project in China**
- Guangzhou Haizhu Circle Line Trial Section
- In operation since the end of 2014
- SuperCaps NVC technology
- Key Features
  - Full NVC, perfectly matching the city landscape
  - Full regenerative brake energy return, reduce the overall energy consumption by 30%
  - The most advanced SuperCaps technology with no potential pollution to the environment

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**First Siemens TMS application in China**
- Zhuhai TMS Turnkey Project
- In operation since Sept. 2015
- Advanced green traffic index system
- Official traffic service website and APP
- Integrated traffic data collection, processing and publication
- Monitor the macro traffic information of the city
- Convenient travel plan for citizens

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Siemens Signalling Co. Ltd. (SSCX)

Siemens (China) Limited established a joint venture Siemens Signaling Co. Ltd. (SSCX) with the then Xi’an Railway Signal Factory (XRSF) in December 1995. It is dedicated to the development, design, manufacture and sales of signaling products and systems as well as related engineering and services for mainline, mass transit, special railway and other rail-bound transportation systems. The company is now one of the major suppliers of signaling products for the Chinese railway, and a Siemens center of competence for railway signaling products and systems in Asia-Pacific.

In the past 20 years, SSCX’s high quality signaling products has been widely used in China’s Dedicated Passenger Lines, High Speed Railway Lines and Metro Lines. The major projects include JingJin DPL, Jinghu high speed line and 23 metro lines in 14 cities. In July 17, 2010, the then Chinese Premier Wen Jia Bao accompanied the German Chancellor Merkel to visit SSCX, during which he praised the company to be the achievement of the long-term cooperation between China and Germany.

Innovation

In the field of railway mobility, SSCX commits to supply signaling products, systems and solutions for the safe, fast and comfortable railway transportation, and focuses on delivering benefits to our customers and society at large. As a part of Siemens Mobility R&D Network, the innovation Center of SSCX keeps close cooperation with Siemens AG, introduces the advanced railway technologies of Siemens into China and makes the product adaptation design to serve the railway modernization of China.

Oriented to the individual requirements of Chinese customers, the Innovation Center has successfully completed a series of customized design including hard- and software and interface for signaling products, such as S 700 K-C Electric Point Machine, S600 Internal Locking Point Machine, CKA External Locking Device, JM2 End Position Detector, Az S350 U Microcomputer Axle Counting System, LED Railway Signal and Balise Transmission Module.

Beside, SSXC takes active actions in intellectual property protection. All the awarded patents cover the portfolio of SSCX, consolidating the competitiveness in the market. In the near future, more innovative products from SSCX will serve Chinese railway market.

Tianjin Zongxi Traction Motor Ltd.

Siemens Ltd. China established another joint venture with long-time partner Beijing Zongheng Electro-Mechanical Technology Development Co. on September 25, 2015. The company is named Tianjin Zongxi Traction Motor Ltd. and will be mainly focusing on the production of traction motors for mass transit. It is scheduled to start operation in the second half of 2016, which will further enhance the localization of Siemens products.
A long-term reliable partner with strong local commitment

The long cooperation history between China and Siemens has verified our long-term commitment to Chinese transportation industry as a strong and reliable partner.

1899
China’s first electric tram in Beijing

1989
Metro cars, propulsion solutions and DC Switchgear for Shanghai’s first metro line - Line 1

1999
Beijing urban traffic control systems (phase I & II)

1997
Electric freight locomotive DJ1 together with Chinese partner

2001
Shanghai Transrapid, world’s first commercial maglev line

2002
Signaling system for Nanjing Metro Line 1

2004
Electric freight locomotive HXD1 together with Chinese partner

2005
High-speed train 300km/h together with local partner

2006
Signaling system for Beijing Metro Line 10 & Olympic Branch Line

2007
Signaling system for Nanjing Metro Line 2

2008
Signaling system for Guangzhou - Foshan Line, China’s first intercity metro line

2009
Propulsion and electric components for highspeed train 350km/h

2009
Shanghai Hongqiao airport parking system

2009
Parking management system in Zhengzhou Xinzheng Airport

2008
Parking management system in Beijing National Theater

2008
Nanjing urban traffic control system

2009
Parking management system in Beijing Tianjin DPL

2011
Parking management system in Beijing Tianshin DPL

2012
HXD1B Locomotive 2-year overhaul

2013
Seven 3-car trains Rolling Stock, and another four as option for south extension of Gurgaon metro line, India

2014
Zhuhai TMS turnkey project

2015
Siemens first 100% low-floor tram project in China, together with local partner

2015
HXD1 Locomotive technical service

Continuing...