

## Cooperation with Western Rolling Stock Manufacturers

New agreements were achieved with the world's largest train and rail machinery producers: Siemens, Alstom, Bombardier, Talgo, Tatravagonka, Knorr-Bremse, including the acquisition of fundamentally new types of rolling stock and traction rolling stock and the localization of their production in Russia.

In March 2012, the first Lastochka passenger train, Siemens Desiro Rus, adapted for operation in Russia arrived in the Baltic Sea port Ust-Luga from the Mukran port of the German city Sassnitz on the Baltic Sea. JSC "Russian Railways" plans to buy 54 trains of this type in total, of which 16 trains, according to the agreement with Siemens, will be assembled in Russia.

Given the strong demand for high-speed passenger transportation, JSC "Russian Railways" has signed an agreement with Siemens to acquire eight additional Velaro RUS Sapsan high speed trains. They will be operated on the Moscow — St. Petersburg route in 2015.

High-speed trains from the Spanish manufacturer Talgo are expected to be operated on the Moscow — Kiev and Moscow — Berlin routes.

In January 2012 in Madrid the JSC "Railway Transport Research Institute" and Patentes Talgo signed a framework contract to adapt passenger rolling stock to be operated on the 1520 mm gauge railway line.

The contract with Patentes Talgo was signed with the assistance of JSC "Russian Railways" and the Spanish state railways operator ADIF.

Cooperation with West European companies helps speed up the modernization of the JSC "Russian Railways" rolling stock, and eliminate the accumulated technological lag in this area. Projects related to technology transfer bring the whole of the Russian mechanical engineering industry to a new level.

### International Scientific and Technical Cooperation of JSC "Russian Railways"

- 1 USA  
**Amsted Railway, Standard Car Truck, Wabtec.**  
Bearings and trolleys
- 2 France  
**Alstom.** Pendolino sm6 "Allegro",  
production of passenger cars locomotives traction, passenger and freight locomotives  
**SNCF.** Development of station complexes  
Projects BCM (including GSM-R),  
training in the field of BCM  
**Geismar.**  
Production of smaller technical equipment
- 3 Germany  
**Siemens.** Velaro RUS "Sapsan"; Desiro Rus "Lastochka"; Electric 2ES10 "Granite"  
**Knorr-Bremse.** Supply of train equipment (certified GOST)  
**Deutsche Bahn.** St. Petersburg State University-based Center for International Logistics and Supply Chain Management
- 4 Spain  
**Talgo.** Trains with variable track width and tilting body
- 5 Netherlands  
**Philips, Pintsch Aben.**  
Resource-saving technologies
- 6 Italy  
**Finmeccanica.** Information systems
- 7 Finland  
**EKE-Electronics.** Unified information infrastructure of passenger trains
- 8 China  
**ZTE.** Digital system technology of radio communications standard GSM-R