

## **China launches high-speed trains**

**China has begun running a new service of high-speed trains, capable of speeds of over 200 km/h.**

The first of the 140 trains left Shanghai for nearby Suzhou at 0538 local time (2138 GMT on Tuesday). Chinese railways are struggling to cope with increasing transport demands and the trains are seen as a way to boost passenger capacity.

Last year China carried some 25% of the world's passengers and freight, on only 6% of its railways, local media say.

The Chinese Xinhua news agency quoted officials as saying the speed increase would raise passenger capacity by more than 18% and freight capacity by more than 12%.

However, the trains will only be able to reach full speed on 6,000km (3,728 miles) of track. Speed restrictions will be imposed on another 36,000km.

The first train took just 39 minutes to travel from Shanghai to Suzhou, cutting the normal journey time in half, Xinhua news agency said.

"It felt like we were travelling on an airplane," 78-year-old passenger Chen Lijuan told the agency.

Driver Liu Dongwei, who began his career on steam locomotives, said the railways had had six speed increases since 1997, when 40-50km/h was the norm.

## **What's the point of speed records?**

**A French TGV has smashed the world speed record for a train on conventional rails, hitting 356mph. But it cost a packet and required months of precision track work, so why bother?**

French rail chiefs hailed it a triumph, while President Jacques Chirac said it was "new proof of the excellence of the French rail industry". The driver, Eric Pieczac, said it made him feel "very happy".

When the TGV train hit 356mph on track between Paris and Strasbourg on Tuesday, it shattered a 17-year-old record and was almost as fast as a World War II Spitfire at top speed.

It's very impressive, but 30m euros (£20m) had been spent specially modifying the 120-mile section of track. The train was powered by two engines, needed special wheels and went twice the maximum speed of a TGV on any passenger route. **So what are the point of speed records?**

While some are a bit of fun or a matter of personal achievement, others - like the TGV - are often the eye-catching highlight of long, expensive projects to explore the technical limits of a mode of transport.

According to rail company SNCF and the train's makers, Alstom, the record attempt represents a test on the infrastructure in extreme conditions, which is impossible to carry out in the laboratory.

### **Inadequacies**

"The record attempt is part of a major project to explore the capabilities of this train, which in turn is part of a general move to get all trains to run faster.

"While work was done on the line, it is still a commercial line which will carry passengers from June and all the technology involved will be available for your average train."

The rail industry wants to reduce journey times between the major European cities to within the three-hour bracket, says Mr Jackson. It's at that point that rail becomes more efficient than short-stop air services and can challenge them.

"As well as offering more choice to customers, it has huge environmental implications," he says. A passenger travelling by Eurostar produces a tenth of the carbon of an airline passenger making a journey of the same distance.

There are also commercial benefits. Alstom hopes the record will boost TGV sales abroad, where it is competing with the Japanese Shinkansen and the German Inter-City Express high-speed trains.