

# Keeping Kazakhstan moving

**TALGO'S NATURALLY TILTING LOCOMOTIVE TECHNOLOGY HAS TRANSFORMED TRAVEL BETWEEN ALMATY AND THE CAPITAL WHILST CREATING NEW OPPORTUNITIES FOR EXPORT**

The considerable reduction in time of the Talgo trains has given a new dimension to the Almaty-Astana railway service

Established in 1942, Patentes Talgo (Talgo) is a world leader in the design, manufacturing and maintenance of rolling stock with three main business areas: design and manufacturing of high speed and very high speed trains; long-distance, intercity, passenger coaches and locomotives; design and manufacturing of maintenance equipment; and the provision of maintenance services for railway operators around the world.

Talgo's activities in Kazakhstan began in July 2000, when Talgo took a 6-car passenger train set to Kazakhstan to demonstrate with real tests what seemed difficult to believe: the fact that by using Talgo's natural tilting technology, the duration of the journey could be drastically reduced without any costly expense in infrastructure.

Thus, with a KTZ locomotive and without any investment in the infrastructure, the tests were a complete success: from 21 hours of journey time with conventional trains between Almaty and Astana with a distance between the two cities of 1,350km, the journey was reduced to 12 hours. As a result, the signing of a contract by which Temir Zholy, Kazakhstan's railway administration, agreed to purchase two 22-car passenger train sets became a reality in December 2000. This was a very important landmark in Talgo's history because it meant entering a market in Central Asia with great potential, vast natural resources and with an increasing presence in the international arena.

Very quickly the competitive advantage of our specific Talgo technology was made evident: reliability and availability figures were successfully tested under the most adverse temperature conditions, reaching values above 98 per cent; the extremely light construction of our trains resulted in a remarkable decrease of energy consumption.



Talgo passenger coaches in Kazakhstan

Each of the two 22-car Talgo train sets consists of 12 tourist sleeping cars, 3 single/double sleeping cars, 3 grand class sleeping cars, 1 restaurant car, 1 bistro car, 1 one-axle end service car and 1 two-axle end service car. The length of each train set is of approximately 290 metres. They have been designed for temperatures of +45-40°C.

These two train sets were delivered in July 2003 and they are currently providing a 365 days/year service between Almaty and Astana. The considerable reduction in time, together with the increase in comfort and security of the Talgo trains, has given a new dimension to the Almaty-Astana railway service, making it a direct competitor to airlines and road traffic covering these two cities.

The story does not end there though. In December 2001, a 6-car modernised Talgo train was delivered to Temir Zholy, only two months after the official order. This was a personal request of the President of the Republic of Kazakhstan, Nursultan Nazarbayev, who wanted a Talgo train to be present in the celebrations of the 10th anniversary of the Republic's independence.

Since the year 2001, Talgo is responsible for the maintenance of these train sets in a maintenance workshop in Almaty, which incorporates the most advanced technology developed by Talgo for the maintenance of trains. Talgo employs a 100 per cent local personnel workforce with a degree of qualification and training. In January 2010 Talgo signed a renewal of the previously explained maintenance contract, for three more years, and on July a joint venture was formed, Tulpar Talgo, for the manufacturing of passenger cars in Astana. Finally, in November 2010, Talgo signed a contract to renew the Kazakhstan Temir Zholy railway's fleet of inter-city vehicles in the near future, starting with 420 coaches for the next 3 years.

Talgo latest technology passenger coaches are able to reduce all corridors' run time by 46 per cent in average, and perform under the most severe climatic conditions with top reliability and availability results. The first coaches will be built in Spain, until production moves to a factory in Astana, which will be built next year by the Tulpar Talgo joint venture of Talgo and KTZ. This is, in the end, a great opportunity for mutual benefit that will provide Kazakhstan with a cutting edge technology applicable to domestic as well as export markets, with local industrial content, both in its manufacture and through the development of auxiliary industries.

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