



Overpass on High Speed Railway Ankara-Sivas (km 449)

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## Railways carry Turkey to the future

*The race of railways which started in Europe in the early years of 1800's is becoming more and more important day by day due to clean and cheap energy consumption, its environment-friendly and noise-sensitive position. The global race on rails that affects the world, notably the European and Far Asian countries, continues with increasing momentum. The developing technology has also affected the railway industry and has made the speed and comfort of trains race against aircraft.*

In line with the developments in the world, a major development in railway investments has taken place in Turkey in the recent years. Since 2003, railways have become a state policy and sufficient sources have been provided; so 23 billion USD investment has been made in railways since 2003. High speed railway projects and rapid rail projects are the most important investments in railways. So far, over 37 million passengers have been carried by High Speed Trains on Ankara-Eskişehir-Istanbul, Ankara-Konya and Konya-Eskişehir-İstanbul High Speed Rail Lines that serve 40 percent of our country's population. 1,213 km of High Speed Railway line is started to be operated and the construction works of Ankara-Sivas and Ankara-İzmir High Speed Railway are going on. In addition, in order to carry both freight and passenger, the works of high speed railway initiated between Bursa-Bilecik, Konya-Karaman-Niğde

(Ulukışla) -Mersin (Yenice), Mersin-Adana-Osmaniye-Gaziantep and Sivas-Erzincan are going on. Currently, the construction works of a total of 3,971 km of railway lines-including 1,870 km of High Speed Railway and 1,290 km of Rapid Lines- are in progress.

### Commissioned high speed railway lines Ankara-Istanbul high speed railway

Ankara-Eskişehir section, the first phase of Ankara-İstanbul High Speed Railway, was put into service in 2009 and Eskişehir-İstanbul section was put into service in 2014. The travel time between two big cities became 4 hours with Ankara-İstanbul High Speed Railway in which the length of the corridor is 513 km and the maximum speed is 250 km/h.

Rehabilitation Project of the Commuter Line between Gebze-Halkalı, which is under construction in İstanbul, is planned to be completed before the end of 2018. When this line, which is integrated into Marmaray, is put into service, HST runs will expand from Pendik to Haydarpaşa/Halkalı.

### Ankara-Konya high speed railway

The infrastructure of Ankara Konya high speed railway line was constructed by totally domestic companies, labour force and own sources as double-track, electrified, signalled and compatible with the speed of 300 km/h. Ankara-Konya High Speed Railway in which the travel time is 1 hour 45 minutes was put into service in 2011.

## High speed railway projects under construction

### Ankara-Sivas high speed railway project

The construction works of Ankara-Sivas High Speed Railway Project, which is one of the important axis of railway corridor connecting Asian countries located on the route of Asia Minor and Silk Road, are going on. Sivas-Erzincan and Erzincan-Erzurum-Kars rapid lines will be integrated to Baku-Tbilisi-Kars Railway Project. When High speed railway project between two cities, which is compatible with the speed of 250 km/h and is double-track, electrified and signalled, is completed, the travel time between Ankara and Sivas will be 2 hours.

### Ankara - Izmir high speed railway

The construction works of Ankara-Izmir High Speed Railway Project, which is launched between Ankara and Afyonkarahisar-Uşak-Manisa and Izmir, are going on. Following the completion of the Project, the travel time between Ankara and Izmir will be 3 hours and 30 minutes.

## Rapid rail projects under construction

### Bursa-Bilecik rapid rail project

Bursa, one of the most developed industrial cities in our country, will be connected to İstanbul, Eskişehir, Ankara and Konya with the rapid railway line being constructed between Bursa and Bilecik. Following the completion of the Project, the travel time between Ankara-Bursa and Bursa-Istanbul will be 2 hours 15 minutes and travel time between Bursa and Eskişehir will be 1 hour 5 minutes.

### Konya-Karaman rapid rail project

Within the scope of the Project, railway line between Konya and Karaman has become compatible with the speed of 200 km/h and become double-track, electrified and signalled. Following the completion of the Project, the travel time between Konya and Karaman will be 40 minutes.

### Karaman-Ulukişla-Yenice rapid rail project

With the Project, rapid rail line between Karaman, Niğde (Ulukişla) and Mersin (Yenice), which is compatible with the speed of 200 km/h and is double-track, electrified and signalled, is under



Ankara high speed maintenance center: a) external view, b) internal view

construction. Following the completion of the Project, freight and passenger will be carried in this line.

### Mersin-Adana-İncirlik-Osmaniye-Gaziantep high speed rail project

Construction of Mersin-Adana-İncirlik-Osmaniye-Gaziantep high speed rail has been planned in order to provide high speed transportation from İstanbul, Ankara and Konya to Karaman-Mersin-Adana-Osmaniye and Gaziantep and its construction works are underway.



Overpass on High Speed Railway Ankara-Sivas: a) km 449, b) km 351



Ankara-Konya high speed line

## Sivas-Erzincan high speed project

In the scope of this project, the construction of electrified, signalled, double tracks between Sivas and Erzincan compatible with an operating speed of 200 km/h has been started. Completion of the Sivas-Erzincan high speed rail is going to be the most important part of the east-west corridor from Edirne to Kars.

## High speed and rapid railway projects planned to be constructed

In addition to the high speed and rapid railway lines that are opened and under construction, the preparation works of high speed and rapid railway line project which is 5.319 kilometres in total still continue.

## Modern HSR stations

As High Speed Railway and the Rapid Railway lines expand, High Speed Train stations have also been built to meet the increasing demand for passengers. Station buildings that are built considering not only transportation needs but also social and cultural needs of the passengers have become the centre of attraction.

HSR Station in Ankara has been brought into service in 2016 after the HSR stations in Polatlı, Bozüyük and Bilecik. The con-

struction works of Konya YHT Gar are still in progress. In addition, it is planned to build new YHT stations in areas where high-speed rail construction is underway and/or planned.

## Ankara Etimesgut HSR maintenance complex

It is of utmost importance that the sets in HSR fleet are maintained in the best possible way so they can be operated safely and reliably and kept ready for use at all times, while our country is paved with High Speed and Rapid Rail networks. For this purpose, the most modern and environmentally conscious HSR Maintenance Complex in Europe has been built in Ankara as the centre of the core high-speed rail networks for heavy maintenance services of the sets in the HSR

fleet. The facility which has 40 railway lines for maintenance and parking services, has the service and heavy maintenance service capacity for 50 HSR sets.

## New sets for HSR lines

19 High-speed train sets were added to the fleet to be operated on HSR lines, 12 of which are compatible with 250 km/h and 7 of which are compatible with 300 km/h. Works are underway to procure 106 HSR sets to be operated on existing and future HSR and rapid rail lines.

## UIC congress will enrich our country

In our country, with the target of double track rail pivoting on East-West and North-South directions supporting the TransAsia middle corridor, it is aimed to extend 1 213 km of high speed and rapid rail tracks to 12 915 km and 11 319 km of conventional rail tracks to 12 115, thereby reaching a total of 25.030 km rail tracks by 2023.

The fact that the 10<sup>th</sup> UIC World Congress on High Speed Rail is going to take place in our country which ranks the 8th High Speed Rail operator worldwide and 6th in Europe; and in the capital Ankara which is the core high speed rail hub, will add more value and meaning to the Congress. As Turkey and TCDD, we will be pleased to host the Congress, which will congregate all stakeholders in the high-speed field, and to welcome our guests.



High Speed Train



## İsa Apaydın - Chairman of the Board and Director General of TCDD

Born in 1965 in Ankara, Turkey, Mr. İsa APAYDIN graduated from the Department of Metallurgical Engineering of Istanbul Technical University in 1987. He received his master degree from the Department of Metallurgical Engineering of Sakarya University in 1996. Starting to work as an engineer in Directorate General of Turkish State Railways (TCDD) in 1987 and assigned in different positions, Mr. Apaydın worked as a Deputy Director General

and Member of the Board in TCDD between 2005-2015. Mr. Apaydın took office of Chairman of the Board and Director General of TCDD on 13.05.2016. Mr. Apaydın is actively involved in the international railway cooperation as Vice President of the International Union of Railways (UIC) and Chairman of Regional Assembly of Middle East (RAME).