

The Beijing-Tianjin-Tanggu Expressway in China.



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China's vision



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China's latest highway project, linking the capital to an industrial growth centre and port infrastructure, incorporates the most advanced traffic management and control system seen in the country. On-line weather data, automated VMS control strategies and CCTV surveillance provides China's credentials to international ITS markets

The World Bank funded Beijing-Tanggu-Tianjin (BTT) Expressway represents one of the most modern road infrastructure projects completed in China to date. The highway, itself a cornerstone in China's ambitious infrastructure development plans, utilises a modern traffic control and information system, designed and installed by German specialists Bosch Signalbau Huber.

The new 140km, four-lane highway links Beijing with the industrial centre Tianjin – one of the largest cities in the

world – and the port of Tanggu, and therefore is regarded as the most important arterial route in China. The project is intended to improve the infrastructure and assure a smooth flow of people and goods between these cities with a population totalling over 20 million. Although the Chinese population has only just begun to be motorised, China decided to build a four-lane highway equipped with the latest signalling technology from the start. The highway will have to be able to cope with the expected rapid increase in individual transport and transport of

goods in the coming years. Bosch Signalbau Huber's contract concerned the installation of the equipment for operating the highway traffic surveillance and control systems.

CONTROL CENTRE

The heart of the system is the control center in Fangzhuang, a suburb of Beijing, where the traffic on the 140km long highway is monitored and controlled. The aim of the system is to keep traffic running smoothly, prevent accidents and if accidents occur, to minimise the danger it could cause to others.

Roadside equipment for data collection and surveillance includes 20 sets of loop detectors – each set is made up of four double loops. This measures the total vehicle count, average speed, truck count and occupancy of the individual lanes.

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