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## AN INTELLIGENT TRANSPORT SYSTEM BASED ON TRAFFIC AIR POLLUTION CONTROL

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In the framework of the Sino-Italian Cooperation Program held by the Italian Ministry of Environmental and Territory, an Intelligent Transport System (ITS) for the city of Beijing has been planned from the Institute for Atmospheric Pollution of the Italian National Research Council. The system investigates the direct link existing between traffic emissions and measured concentrations; this study consents to concern and better plan the future development of the traffic management in the city of Beijing, but also in further cities. The project target is the implementation of a tool for the reduction of traffic emissions. Therefore, the ITS input is the control of Traffic Air Pollution: by identifying the pollutants distribution through an Air Quality Monitoring System, the Beijing ITS addresses in the long term the operating of the traffic flow management system by limiting the access of traffic pollution sources and better managing the public transport. According to this requirement, the main operation strategies are: measurements of pollutants concentrations in ambient air; measurements of traffic emissions; set-up of a simplified environmental transport model able to simulate in different scenarios the mobility and calculate the relevant vehicles emissions; monitoring of traffic sources; management of public transport. This paper gives on overview of the project findings and the related study outcomes.