

Intelligent transportation systems and their applications in road transportation industry in Turkey

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Abstract— Urbanization has been evolved both in developed and emerging countries in the world. Increase of urban population, mobility, the usage of internet and computerized systems, environmental friendly applications are likely to lead dynamic changes in the community life and also life style. Increasing of the car usage and the need for carriage induce rapid growth of traffic intensity which cause some transportation problems especially in the road transportation industry in the world. Intelligent Transport Systems (ITS) have been developed to solve probable problems caused by the modern transportation environment through the adaption of innovative technologies recently. ITS are the advanced integration systems which plan, manage and control all the relations of passengers, drivers, vehicles, road operators, managers and the environment. Furthermore, the aims of these systems are to deal with traffic congestion, traffic and road status, pedestrians, vehicles, roads, traffic jam, pollution and accidents for efficient and safety transportation management by using computer, electronics and communication technologies in many countries.

With the increased problems of the traffic congestion in the metropolitan cities in Turkey, the road transportation management has become a vital research topic to overcome its major problems immediately. By this reason, Intelligent Transport Systems are considered as new promising applications to solve these problems in Turkey. In line with this aim, the purpose of this paper is to shed light on the usage, benefits and importance of these systems with available applications in Turkey especially Turkish road transportation industry.

Key words— Information Technologies, Intelligent Transportation Systems, Road Transportation, Transportation.

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Abstract received by 1 May 2015.