

A PROJECT REPORT ON
Dynamic traffic light sequencing using
Radio Frequency Identification

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ABSTRACT

Traffic congestion is recognized as major problem in modern urban areas, which have caused much frustration and loss of man hours. The operation of standard traffic lights which are currently deployed in many junctions, are based on predetermined timing schemes, which are fixed during installation and remain until further resetting.

In order to solve these problems an intelligent RFID (Radio Frequency Identification) traffic control has been developed. RFID is an automatic identification method, relying on storing and remotely retrieving data using devices called RFID tags.

A Dynamic traffic light sequence algorithm for the control of the traffic sequence that can change dynamically is proposed to facilitate the efficient traffic control at the junctions. It also can manage more complicated traffic problems using RFID.

RFID technology with Dynamic Traffic Light Sequence algorithm is applied to a multi road junction area to provide an efficient time management scheme.

The proposal shows that, the algorithm has the ability to intelligently adjust itself even with the presence of some extreme cases. The real time operation of the system is to judge the traffic management, by considering the number of vehicles in each lane.