A Low Cost Efficient Model for Automatic Barricading of Unmanned Railroad Level Crossings

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Abstract

Safety on the Indian Railways network is the end product of the cohesive fusion of its myriad parts. Railroad related accidents are more serious or deadly than other transportation accidents in terms of severity and death rate etc. The problem of railway accidents is not of safety standards but the execution of standards. Unmanned Level Crossings continue to be a matter of concern for Indian Railways as most of the train mishaps take place in these unmanned level crossings. There are about 10,000 unmanned railway crossings in the country which account for around 40 per cent of accidents involving the railways. Therefore, Safety at unmanned level crossings is a cause of serious concern for railways and the public transporter is exploring various ways to address the issue.

This paper presents a novel concept of an application to improve safety at unmanned level crossings without the burden of a huge infrastructure cost to the railways governing body. A low cost innovative reliable model has been proposed for automatic blockading of unmanned railway level crossings. It explores too the quest for improved performance, and the need to
focus not just on safety, but to contribute to the delivery of a cost-effective, efficient railway as well.

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**Index Terms**

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**Keywords**

Technology, Level crossing, traffic management, logic gates, innovation