Evaluation of Functions of a Train Control System by Using the On-board Interlocking

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For secondary lines, a prototype of a new train control system which has cheap wayside equipment costs was developed. In the developed system, the on-board equipment controls the blocking and the route setting. The on-board equipment demands securing of blocks from the block controller and instructs the point controller on switching the points. The on-board equipment which reads the information of tags performs these controls by radio. In addition, cheap RFID tags are used for the tags on the track. We evaluated the safety of each function of the developed system and reading performance of the information of the tags. In this paper, we describe the process of safety evaluation.