

Train and Traffic Prediction Control Method Adapted to Line Conditions

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We had proposed previously a train control method named “prediction control”. The method aims to prevent undesirable deceleration or stop of trains between stations in a high-density line and to control train’s speed appropriately, based on the prediction of the train movement and data communications. However, this proposed method was based only on the basic conditions. Therefore, we have now proposed a new control method adapted to turn-back and passing operation. We have evaluated a performance of the method by traffic simulation, and as a result confirmed that the method can reduce opportunities of train stop between stations and power consumption at sub-stations. On the other hand, it has been clarified that an ability of recovery from train delay depends on relationship between the possible minimum headway and the scheduled train interval.