

Social experiment of ETC 2.0 vehicle operation management assistance service

(Research period: FY 2015–2017)

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Keywords: ETC 2.0, vehicle operation management assistance service, distribution

1. Introduction

The Ministry of Land, Infrastructure, Transport and Tourism (MLIT) is aiming to realize productive and wise operation management in an effort to use roads wisely. MLIT is thus planning to start the ETC 2.0 vehicle operation management assistance service that supports distribution companies managing the operation of vehicles to improve the efficiency of operation management and the effort to ensure the safety of drivers by providing various information, such as driving locations and braking.

2. Outline of social experiment

The National Institute for Land and Infrastructure Management has been conducting a social experiment by publicly recruiting distribution companies managing vehicle operations to analyze and evaluate the improvement in the efficiency of operation management, effectiveness of services to ensure driver safety, feasibility, and social effects of the ETC 2.0 vehicle operation management assistance service to use the findings for efficient and effective application of the service since February 2016. This experiment uses the specified probe data extracted by specifying vehicles using the ID of on-board ETC 2.0 based on the application from the participating companies.

3. Evaluation of the effect of the service

The ETC 2.0 vehicle operation management assistance service includes a service that uses the information of the location of vehicles and a service that uses the information on sudden braking.

The service that uses the information on the location of vehicles includes the function to check the location of a driving vehicle and forecast the arrival time at the destination. Seventeen out of nineteen companies that used this service found that the service was useful in providing quick responses to inquiries by checking the location of vehicles and shortening cargo waiting time for drivers and unloading staff by notifying them of arrival times. Meanwhile, the acquisition of information may be delayed in areas without roadside equipment, which needs to be dealt with in the future. In addition, 12 companies responded that they would like to continue using this service.

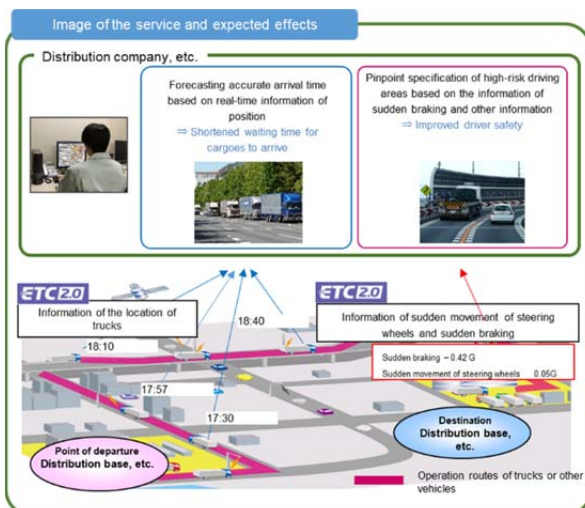


Figure 1. Image of the vehicle operation management assistance service

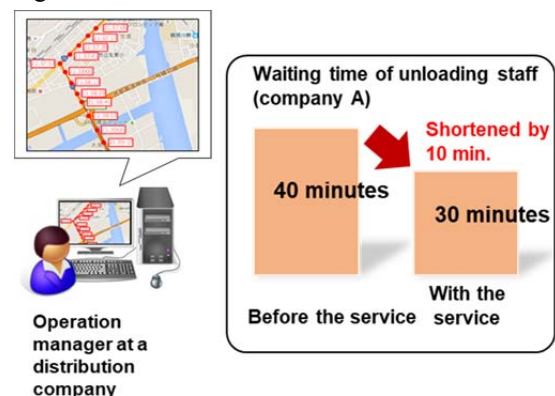


Figure 2. Image of vehicle location display service and example of its effects

4. Future activities

The ETC 2.0 vehicle operation management assistance service is going to start from FY 2018. NILIM is going to keep improving the convenience of this service.

☞ For detailed information

1) The 14th Distribution Subcommittee, ETC 2.0 vehicle operation management assistance service
http://www.mlit.go.jp/policy/shingikai/road01_sg_000376.html