Development of Automatic Train Operation System Based on ATS-DK

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ATO (Automatic Train Operation) system based on ATC (Automatic Train Control) is used to automate driving and maneuvering on several lines such as new transport system or subway system in Japan. In order to reduce train operating costs further on local lines, it is desired to realize automatic driving system conducted by a staff who does not have a train driver's license. Aiming to realize low-cost automatic train operation, we have developed the ATO system based on ATS (Automatic Train Stop) -DK with permissible speed profile. In this paper, we show the concept of the ATO system based on the ATS, and report on the specifications of this system and the functional field test results.