

Development of DS-ATC for Hokuriku-Shinkansen, Applicable to 50/60Hz Feeding

Natsuki TERADA Rinichi YOKOTA Takahiro SUGAI
Takaya KASAI Shingo TAKEDA

We developed DS-ATC (Digital Communication and Control for Shinkansen Automatic Train Control) for 60Hz feeding, applicable to Hokuriku Shinkansen extension project. There are three big challenges. First, the current DS-ATC system for 50Hz feeding is required to be arranged for 60Hz feeding. Second, the onboard system and the ground equipment are required to switch between signal for 50Hz feeding and that for 60Hz feeding at handover area. Third, in some areas the ground equipment is required to be compatible with both 50Hz and 60Hz feeding. We report how we overcame these challenges.