

Method for Resetting Operation Regulation Standards Considering Seismic Risk of Railway Facilities

Kimitoshi SAKAI Kazunori WADA Akihiro TOYOOKA

The regulations of seismic intensity to suspend a train operation after earthquakes is determined empirically according to the past disaster. Therefore, it is difficult to reflect the effects of seismic countermeasures, such as seismic reinforcement and additional seismometers, in the regulation standards of train operations. To resume train operations as quickly as possible after an earthquake, this study proposes a method for updating the regulation standards of train operations based on risk analysis. In the proposed method, the seismic risk of each facility is evaluated and used to determine the regulations for suspending a train operation. Using this method, the effect of seismic countermeasures, such as improving the seismic performance of railway facilities and adding seismometers, can be directly reflected to the regulations of train operations.