

**Basic Study on a Method to Calculate Fluctuations of Strength of Radio  
Disturbance Wave Emitted from Railway Systems to Railway Side**

Kunihiro KAWASAKI

Measuring methods and emission limits for radio disturbance wave emitted from railway systems has been already established by International Electro-technical Committee (IEC). However, at this time, there are no usable methods yet to calculate the strength of the radiated emissions from operating railway systems that include running trains. Therefore, to know characteristics of the radiated emissions, or, to evaluate effects of countermeasures to reduce the emissions, we cannot help carrying out measuring tests which need so much time and costs. Then, to reduce these time and costs, our institute has started a study to establish a method to calculate the strength of the radiated emissions from railway systems. As a result of the study, one basic method to calculate trends of fluctuations of the strength of the radiated emissions from a running vehicle has been worked out. This paper outlines characteristics of the radiated emissions from railway systems and reports a result of the basic study on the calculation method. Moreover, this paper presents a future plan for the development of the method.