

## **Development of a Sensor Data Collecting System for Health Monitoring of Railway Structures**

Norio SATO   Tatsuya NIHEI   Junji ISONO   Takashi NAKAYAMA   Yoshihiro WATANABE

We have developed a sensor data collecting system for health monitoring of railway structures such as viaduct and tunnel. In this system, we can select an appropriate way to collect data depending on deformation of structure: by RF-ID tag or low-power radio. This system deals with damage of RC frame, damage of foundation structure, and crack of tunnel. The collected data can be easily referred to and analyzed with PC of the management district. By using this system, the inspection work of the railway structures can be streamlined and the inspection precision can be improved.