

## *Newsletter on the Latest Technologies Developed by RTRI*

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# Railway Technology Newsletter

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## **R&D** for the Future of Railways

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### Hideyuki TAKAI

Executive Vice President

In its master plan "RESEARCH 2010 - Toward Sustainable Development of Railways," RTRI set up three themes as the mainstays of its R&D: "R&D for the future of railways," "Development of practical technologies," and "Basic research for railways." Specifically, the research concerned with the theme of "R&D for the future of railways" was completed in March 2015 after implementing activities to address the following challenges categorized into five fields: "Safety and Reliability of Railway System," "Innovation of Maintenance," "High-efficiency Energy Utilization," "Sustainability and Development of Railway Networks," and "Construction of Railway Simulators" (Fig.1).

During the period of those activities, in March 2011 Japan suffered "the Great East Japan Earthquake" and a subsequent tsunami as well as the Fukushima nuclear power





plant accident. As a result, implementation of countermeasures against massive earthquakes and improvement of energy utilization efficiency became urgent challenges to address immediately and not sometime in the future as RTRI had originally planned. Accordingly, RTRI has publicized results of relevant activities and already brought

> some of them into practical use. There are also many items for which RTRI's efforts need to be stepped up during the next five years.

> RTRI is determined to capture social changes and technology trends ahead of anybody, promote R&D aggressively while bringing its total capability into full play, and convey the outcomes in a timely manner to concerned parties. In this manner, RTRI will continue contribution to the development of railways and to the buildup of an affluent society.

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