



Newsletter on the
Latest Technologies
Developed by RTRI

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Japanese Railways and Globalization

Norio FUKUSHIRO
Executive Director

Recent years have seen an increase in the number of Japanese railway technologies exported overseas. Issues such as the technologies provided for construction of the Taiwan High Speed Rail and the export of high-speed trains to Asian and European countries have been much talked about in Japan. In urban railways, exports have grown solidly, while a significant amount of rolling stock is now produced overseas using technology developed in Japan.

Very few trains in use in Japan, however, are manufactured by overseas companies, the only real example being the Hiroshima Electric Railway low-floor trams from Germany. Why is it that trains from overseas are not used in Japan?

Japan National Railways (JNR) held almost all relevant technologies in Japan, as JNR maintained and operated railways throughout Japan for many decades. (They were operated by Japanese Government Railways before World War II.) As a result, the roles of the operating company and manufacturers became well defined—JNR (the operating company) would determine detailed specifications of rolling stock, equipment and facilities while manufacturers would deliver products according to such specifications.

The roles of operating companies and manufacturers are somewhat different overseas. As in many cases individual train services cover a number of countries and are operated by several different companies, manufacturers have played an active part in development of rolling stock and other facilities. It is likely that this difference is the main reason rolling stock and technologies from overseas have not been used in Japan to a significant extent.

However, with economic globalization, further growth will be seen in import and export of railway technologies and joint



development between Japan and overseas. With such trends, international standards will become increasingly important as keys to establishing a fair international business market.

RTRI should therefore devote sufficient attention to international standards when determining the direction and details of future research.

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