

Co-operative Study with RSSB

Koichi GOTO

Director, International Affairs Division

In October 2008, RTRI initiated a co-operative research agreement with RSSB (Rail Safety & Standards Board), a British organization actively engaged in advanced research and development concerning the performance, cost and safety of the railway system. In December 2008, studies on the themes shown in Table 1 were launched. On 12 November 2010, a meeting to confirm co-operative research results was held at RSSB in London.

RTRI sent to this meeting Mr. Takai, Director of the Research & Development Promotion Division, Mr. Shigemori, Senior Researcher in the Human Science Division and Dr. Goto, Director of the International Affairs Division. On the RSSB side, Dr. Ann Mills and Mr. Huw Gibson, in charge of the theme related to human factors, participated in the meeting, together with Mr. Anson Jack, Director of Policy, Research and Risk, Mr. Guy Woodroffe, Head of Research and Development, Mr. Michael Woods, Head of Operations and Management Research and Dr. Tanya McCallum, Senior Research Strategy Manager, in charge of research partnerships. Mr. Len Porter, Chief Executive of RSSB, was also present at the meeting.

It should be also noted that Mr. Woods visited Tokyo in September 2010 to attend a symposium on level crossings held by the International Union of Railways (IUC). On that occasion he also visited RTRI for discussions about joint research activities and delivered a lecture on the activities of RSSB (Fig. 1). Figure 2 shows Mr. Woodroffe and Dr. McCallum with Mr. Takai and Dr. Goto in the meeting held at RSSB.

In the meeting, Dr. Mills, Principal Human Factors Specialist,

made a presentation on RSSB's activities relating to human factors. During her presentation there was a lively discussion about an aptitude test for train drivers, as RTRI had also recently developed a new test method. Following Dr. Mills, Mr. Shigemori reported on the theme which was completed in September. His report was related to results from an analysis of RTRI's data where RSSB's analysis method had been applied. This was followed by discussions about how to collect data, how to classify errors and a model for human error. The participants finished the session on the theme while checking the results from their study. The researchers from both parties agreed to continue exchanging information and opinions as required. Subsequently, the meeting proceeded to a discussion about new themes, and the participants decided to pursue the two themes shown in Table 2 during the term between April 2011 and March 2014. Researchers in charge will start discussions about these themes, exchanging their knowledge, experience and information on technical matters and opinions about the direction in which to move. In this scheme, we expect that researchers will further promote their activities so as to yield fruitful results through their collaboration.

Finally, Mr. Takai and Mr. Woodroffe signed a memorandum on the information exchange between the two organizations as proposed by RSSB and agreed by RTRI (Fig. 3). We hope that RTRI and RSSB will further deepen the friendly ties and contribute to development of railways in the world by leveraging the knowledge and experience that the two organizations have developed and accumulated.

Table 1 Co-operative themes: Phase I

Theme	Period
The influence of the human factor in risk assessment and the classification method of human action	2008.12 – 2010.9
Research and survey on design, manufacturing and maintenance of axles and wheelsets	2008.12 – 2009.12

Table 2 Co-operative themes: Phase II

Theme	Period
New materials to improve railway performance	2011.4 – 2014.3
Increasing railway network capacity, focusing particularly on "nodes" or "bottlenecks" in the rail network	2011.4 – 2014.3



Fig.1 Mr. Woods at RTRI



Fig.2 Meeting at RSSB



Fig.3 Signing of memorandum