Implementing Arrangement between the Department of Transportation of the United States of America and the Ministry of Land, Infrastructure and Transport of Japan, Concerning the Effect of Seismic Events on Railroad Tracks, Structures and Facilities

The Department of Transportation of the United States of America and the Ministry of Land, Infrastructure and Transport of Japan (hereinafter referred to as "Participants");

In accordance with and subject to the Agreement between the Government of the United States of America and the Government of Japan on Cooperation in Research and Development in Science and Technology signed at Toronto on June 20, 1988, as extended and amended (hereinafter referred to as "the Agreement");

Recognizing the importance of the Implementing Arrangement between the Department of Transportation of the United States of America and the Ministry of Transport of Japan on Cooperation in Transportation Science and Technology, signed at Washington on February 10, 1994; and

In order to set forth the Implementing Arrangement (hereinafter referred to as "Arrangement") on cooperation in research concerning the effects of earthquakes on railroad tracks, structures, and facilities;

Have reached the following understandings pursuant to paragraph 3 of Article 2 of the Agreement:

I. PURPOSE

This Arrangement provides for cooperation in the field of seismic research and investigation. The purposes of this Arrangement are: to determine the specific terms of cooperation on the exchange of engineering and scientific information between the Participants; to improve the general understanding in the behavior of railroad tracks, structures and facilities in earthquakes; and to reduce the potential for human casualties and disruption of vital transportation services following earthquakes.

II. DEFINITIONS

The term "railways" as used in this Arrangement includes all transportation systems in commercial operation using fixed guideways, including but not limited to intercity freight and passenger railways, high speed intercity railway systems, urban rail transit systems, magnetically levitated vehicle systems, and monorail systems. The Federal Railroad Administration (FRA) will coordinate activities related to urban rail transit systems with the Federal Transit Administration (FTA) of the U.S. Department of Transportation, which has responsibility for these operations in the United States.

The interest of the Participants in seismic behavior extends to all infrastructure components of railways subject to significant ground motion in a seismic event, whether or not actual damage has occurred. The Participants are interested in understanding the ability of existing structures to withstand seismic loads, new methods and procedures to mitigate and prevent casualties and damage which would result from seismic failures of existing infrastructure components, as well as design improvements for new or rebuilt components.

III. SCOPE OF COOPERATION

The scope of cooperation to be conducted by the Participants with the participation of the task groups established to address specific issues of mutual concern, is set out in Annex A to this Arrangement.

IV. PROJECT MANAGEMENT

Project managers for this Arrangement are:

✓ For the Department of Transportation:

Gordon A. Davids, P.E.
Chief Engineer, Structures
Office of Safety
Federal Railroad Administration
U.S. Department of Transportation

✓ For the Ministry of Land, Infrastructure and Transport:

Hiroshi Saeki
Director for Engineering Planning Division
Railway Bureau
Ministry of Land, Infrastructure and Transport

V. FUNDING

The participation of each Participant is subject to the availability of appropriated funds

authorized therefor. No transfer of funds between the Participants is envisaged in connection with this Arrangement.

VI. DISCLAIMER

Each Participant should ensure, to the extent possible, the accuracy of any data transmitted to the other Participant pursuant to this Arrangement, but the accuracy of such data is not guaranteed. Each Participant may use the other's data at its own risk and may not hold the other Participant responsible for damages arising from the use of such data.

VII. CONTRACTORS

The project officers in charge of undertaking this Arrangement may call upon the services of outside bodies (railway operators, consultants, research centers, universities, members of industry, etc.) to conduct technical exchanges on their behalf under the terms of this Arrangement, or to take part in such exchanges on their behalf. The project officer so employing such a contractor should cause such a contractor to sign a non-disclosure agreement (or equivalent) in order to assure protection of proprietary data and information, consistent with the laws of that Participant's country.

VIII. MISCELLANEOUS

a) This Arrangement will commence on the last date of signature appearing below. Either Participant may give written notice to the other Participant of its intention to terminate this Arrangement. This Arrangement shall terminate sixty (60) days after the date of receipt of the notice by the other Participant.

b) Not withstanding the provision VIII (a) above, this Arrangement remains effective provided that the Arrangement is in force.

c) This Arrangement may be amended at anytime by mutual consent of the Participants.

d) Implementation of this Arrangement will be subject to the Arrangement and to the laws and regulations in force in each country.

Done in duplicate in the English and Japanese languages, both texts being equally authentic.

Daniel C. Smith
Associate Administrator for Safety
Federal Railroad Administration
U.S. Department of Transportation

DATE: September 27, 2005

Hiroyuki Yamashita
Deputy Director-General for Engineering Affairs
Railway Bureau
The Ministry of Land, Infrastructure and Transport

DATE: September 27, 2005

ANNEX A
AREAS OF COOPERATION AND TASKS

1. Each Participant should designate a small team of experts (hereinafter referred to as the "Experts") in the field of seismic effects on railway infrastructure. The Experts from one Participant should be available to travel to the other Participant shortly after, as determined jointly on a case-by-case basis, an earthquake occurs in order to evaluate the effect of the seismic event on railways and railway facilities. Each Participant should inform the other Participant in advance of the identities, fields of interest, and general professional backgrounds of their designated Experts.

2. The primary qualifications for the selection of the designated Experts should be technical knowledge and ability to evaluate and assess seismic events and their effects on railway infrastructure; availability to travel aboard on short notice; and, the physical abilities needed to perform such assessments in the conditions immediately following a major seismic event. Experts may be government officials at the national or local level; railway or other private sector employees; consultants in the field of seismic effects; or members of the academic community.

3. When a seismic event occurs, the affected Participant should coordinate the visits by Experts of the other Participant to those areas where, as determined on a case-by-case basis, seismic ground motion under railways and railway facilities has occurred. Such visits will be solely at the convenience of the affected Participant.

4. The affected Participant may specify the maximum number of Experts to be named to the visiting team. Typical team size is expected to be in the range of two to five persons. Neither Participant should permit such visits to interfere with essential rescue, relief, or restoration activities following a disaster. Arrangements and accommodations for the visiting team should be in keeping with the expedient and practical nature of the visit, and recognition that the areas to be visited may be in undergoing recovery and restoration following the seismic event.

5. The visiting team of Experts should endeavor, to the extent practicable, to advise the affected Participant of its general findings before returning to their homeland. Information, evaluations, and findings resulting from such visits should not be published or otherwise disseminated publicly until the project manager of the affected Participant has had an opportunity to review such material.

6. Each Participant should host, in turn and from time to time, a meeting of the Experts from both countries in order to discuss developments in railway-seismic issues, differences, and similarities in characteristics of railways and railway facilities of the Participants. Such meetings should also provide opportunities to plan appropriate contingent arrangements to be implemented if, and when, it becomes necessary for the Experts of one Participant to travel to an earthquake-affected area of the other Participant's country.

It is anticipated that these meetings will occur approximately once per year, provided that no significant seismic events have occurred during the year. Those meetings would normally be held in conjunction with the annual Experts Meeting of U.S.-Japan Cooperation in Transportation Science and Technology, but may also be held in conjunction with a meeting or conference on seismic-related subjects in either country.

7. Each Participant should provide the other Participant with detailed findings related to the behavior of railways and railway facilities following a seismic event in that Participant's country as such findings become available. Such findings will usually be in the form of technical reports and/or presentations. The Participant furnishing information would specify, if any, restrictions which are to be placed on the use of the information, consistent with the laws of that Participant's country. If no such restrictions are indicated, the information would be treated as published technical material which may be further disseminated following customary rules for proper citation as to the source. Translation of documents will be the responsibility of the Participant desiring the translation. Copies of any such documents translated by one Participant should be furnished to the other Participant, which should review them as soon as possible to verify the translation.

8. Each Participant should provide to the other Participant any new or revised specifications for seismic design and protection of railways and railways facilities which may be generally adopted by the railways operating in the country of that Participant.