

International Research Activities

1. International Research Activities in NILIM

The National Institute for Land and Infrastructure Management (NILIM) promotes international research activities based on the following three perspectives.

(1) Contribution to domestic policy from the technical side

While utilizing bilateral agreements concluded mainly with NILIM and other agreements, etc. concluded by the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) itself, NILIM builds networks with overseas government agencies and others, gathers information on advanced cases, etc., and reflects that information in domestic policy proposals and technical standards, etc.

(2) Contribution to technical cooperation with developing nations, etc.

Utilizing the knowledge and lessons learned in operation and maintenance (O&M) of public facilities in Japan, disaster response, etc. and the results of research on advanced disaster prevention and disaster mitigation measures reflecting those resources, NILIM provides support for the establishment of countermeasures and technical standards for the advanced technological challenges faced by local governments in the developing nations and improvement of the capabilities of government staff in technology-related positions.

(3) Contribution to overseas development of Japan's strong technologies

Using knowledge for the establishment of technical standards that support policy development in Japan, NILIM participates in international standardization activities such as those of the International Organization for Standardization (ISO), contributes to international standardization of technologies in which Japan is particularly strong, and also shares information on NILIM's research achievements at international conferences, the institute's English-language website, etc.

2. Main International Research Activities in 2023

Although NILIM's international research activities were unavoidably interrupted or delayed during the COVID pandemic, those activities were successively resumed in 2023, and have now returned to approximately the same level as before the pandemic.

Here, the following introduces the main international research activities of NILIM in 2023.

(1) Contribution to domestic policy from the technical side

① Research cooperation with the Directorate of Road and Bridge Development Engineering (DRBE), Ministry of Public Works and Housing of Indonesia

In 2009, NILIM and Japan's Public Works Research Institute (PWRI) respectively exchanged Memorandums of Understanding (MOUs) on research cooperation with

DRBE (at the time, Institute of Road Engineering (IRE), the predecessor of the DRBE) and carried out research cooperation in the five fields of traffic technology, pavement, tunnels, earthworks and soft ground.

On November 23, 2023, the Director of DRBE and other officials from that organization paid courtesy visits on NILIM and PWRI, during which the two sides exchanged views on the current condition and challenges for bridges and tunnels in Indonesia, future research cooperation and other issues, and the visiting delegation observed the experimental facilities at NILIM and PWRI.



Photo-1 Courtesy visit by mission headed by the Director of DRBE

② Meeting of the Directorate for Roads in Vietnam (DRVN) and NILIM on highway bridges

NILIM has been engaged in research cooperation with the Directorate for Roads in Vietnam (DRVN), which is an agency of Vietnam's Ministry of Transport (MOT), based on a MOU between Vietnam's MOT and MLIT's Road Bureau concluded in 2012. NILIM also deepened its research cooperation by concluding a separate MOU on O&M of highway bridges in 2020.



Photo-2 Scene from the meeting with DRVN

In 2023, NILIM held an exchange of views with DRVN and Vietnam's University of Transport and Communications (UTC), which is affiliated with DRVN, on conducting monitoring to gather information and elucidate the causes of cases of cable damper damage in Vietnam. In line with those activities, NILIM also coordinated plans to hold a workshop for an exchange of opinions on trends in research and development for preparation of standards for the design and O&M of long-span bridges and issues related to the practical work.

③ Research cooperation with the Korea Research Institute for Human Settlements (KRIHS) in the urban policy field

NILIM is conducting ongoing research exchanges with KRIHS based on a MOU on research cooperation signed in 2012.

In March 2023, a NILIM mission visited Korea for a joint survey of the current condition of smart cities, and also carried out surveys and an exchange of opinions on the condition of suburban new towns in Korea and the condition of use of vacant houses.



Photo-3 Courtesy visit to KRIHS

(2) Technical cooperation with developing nations, etc.

① Acceptance of trainees from the World Bank, JICA, etc.

With the exception of lectures via the internet, acceptance of trainees was interrupted during the COVID pandemic, but in 2023, full-scale acceptance of trainees from overseas was resumed by the Japan International Cooperation Agency (JICA, an Independent Administrative Institution) and others.

As training for staff members of Cambodia's Ministry of Rural Development (MRD), in September, NILIM cooperated in providing training in various fields through lectures on the pavement field, public works procurement, etc. at the request of the World Bank Tokyo Disaster Risk Management (DRM) Hub.

② Support for technical cooperation projects

In response to a request by JICA, in 2023, NILIM dispatched its researchers for preliminary surveys for a flooding countermeasures project in Indonesia and a bridge construction project in the Philippines.

③ Dispatch of experts to the Japan Disaster Relief (JDR) Team

NILIM dispatched three of its researchers to an expert team of JICA's Japan Disaster Relief Team in response to damage caused by a major earthquake that occurred in

February 2023 with its epicenter in southeast Turkey. (For details, see p. 100.)

④ Cooperation on establishment of technical standards for ports and harbors

In March 2024, the NILIM invited staff members of Vietnam's Institute of Transport Science and Technology (ITST) to the institute. The two research institutes exchanged views on climate change and decarbonization of ports and harbors, and plan to hold ongoing discussions on methods for reflecting the content of those studies in technical standards for ports and harbors.

⑤ Technical cooperation on revision of technical standards related to airport pavement

The Civil Aviation Authority of Vietnam (CAAV) plans to revise its technical standards for airport pavement, and the policy of Japan's Civil Aviation Bureau is to provide technical cooperation for the revision of those standards. The first meeting of working-level persons from the two countries was held in February, and NILIM explained Japan's technical standards for airport pavement.

(3) Contribution to overseas development of Japan's strong technologies

① ISO

During 2023, NILIM researchers participated in the following ISO Technical Committees (TC):

- TC224 (Drinking water, wastewater and stormwater systems and services)
- TC92/SC3 (Fire threat to people and environment)
- TC205 (Building environment design)

② Participation in ICOLD

NILIM participated in the Annual Meeting of the International Commission on Large Dams (ICOLD), which was held in Gothenburg, Sweden in June 2023, and discussed a proposed report on "Interpretation of seismic data obtained from dams" as the Japanese elected member of Technical Committee B, "Seismic Aspects of Dam Design."



Photo-4 Scene from the 2023 Annual Meeting of ICOLD

☞ For more information:

1) NILIM website (International Activities)

<https://www.nilim.go.jp/lab/beg/foreign/kokusai/kokusait/ekikatudou.htm>

2) NILIM website (International Coordination Division)

<https://www.ysk.nilim.go.jp/kakubu/kanri/kokusai/>