The 5th JOINT WORKSHOP HELD IN HANOI, VIETNAM

From 29th Oct. to 2nd Nov.

The 5th Joint WS for the technology and policy research of Road and Transport was held in Hanoi by NILIM, Japan and ITST, Vietnam (*) with sister organizations from 29^{th} Oct to 2^{nd} Nov.

(*)ITST, Vietnam: Institute of Transport Science and Technology, Ministry of Transport, Vietnam

- 1. The theme for this time Joint WS
 - In this 5th Joint WS, picked up five themes focused on;
 - 1) Thang Long Bridge Rehabilitation Project
 - 2) Road Noise Investigation
 - 3) Protective Coating for Steel Structures
 - 4) Construction and Maintenance Method of Tunnel in Vietnam
 - 5) Technology transfer Port and Harbor facilities Rehabilitation Maintenance



Opening ceremony



Opening address



Technical visit (Thang Long Bridge)



Road noise investigation

2. Outline of Technical Session

1) Thang Long Bridge Rehabilitation Project

There are two matters were discussed concerning to this Thang long project. One is how to repair pavement, and the other is how to reconstruct the whole pavement.

Japanese side supports Vietnamese Side to make Vietnamese standard for design, construction and maintenance of traffic infrastructure such as roads, bridges, etc..

2) Road Noise Investigation

NILIM and ITST jointly accomplished the investigation about road noise at 6 locations along the Ring Road No. 3 in Hanoi, Vietnam. Prior to the investigation, we had the meeting to share the results and the each opinions of the pre-investigation in February 2012, and to confirm the detail plan of the investigation in this time and measuring method of equipment using in the investigation.

As a result, we understood the below situation.

- 1) The main factors of high road noise level are the heavy traffic volume includes extra big trucks and motorbikes, and increased automobile horn number caused by traffic congestion.
- 2) The road noise level on the ground reduce in some level by shifting the through road traffic to elevated road or embankment road located the center of the road cross section.
- 3) It is difficult to achieve the noise standard in nighttime at any point in Hanoi, because the mitigated rules of noise standard for roadside areas supported social and economic development in the country, have already introduced in Japan, do not introduce in Vietnam.

In the next joint workshop, we decided to discuss the below themes.

- 1) The results and each opinions of the investigation in this time
- 2) How to estimate the reducing effect by each countermeasures of the road noise.
- 3) How to proceed in the investigation and research about roadside air pollutions, and the countermeasure introduced ever in Japan.

3) Protective Coating for Steel Structures

From Japan side, heavy-duty coating system with fluororesin paint and innovative paint remover are presented. And also outline of Japanese coating guideline was introduced. On the other hand, Vietnam side introduced the need of paint remover in Vietnam and present state of protective painting for steel bridges in Vietnam. As a result of discussions, both sides came to an agreement to undertake a joint research on durability of fuluororesin paint topcoats in Vietnam and to prepare draft technical guideline on painting for Vietnam by reference to Japanese guidelines.

4) Construction and Maintenance Method of Tunnel in Vietnam

The situation of construction relating to road tunnel in Vietnam, and the contents of occurrence of defect and deformation in road tunnel at both mountain area and urban area were reported and the causes of













defects, the necessity of countermeasure and investigation were discussed. Also, the introduction of basic notes, inspection, investigation and countermeasure as for making-up maintenance guideline draft for tunnel was discussed. As a result, the Vietnam side will make up the draft by the end of 2013, technically supported by Japan side.	
5) Technology transfer Port and Harbor facilities Rehabilitation	-
Maintenance	
Japan side presented Rehabilitation technologies for port facilities	
and Viet Nam side presented Situation and maintenance for port	
facilities.	
Both sides discussed the matters relating to standard, material and technologies for rehabilitation works.	
Japan side agreed to provide the technical document such as	
standard, handbook and manual relating to repair and rehabilitate the	
port facilities in Japan.	
Both sides agree to exchange the information technologies relating	
as follows, (1) technology reinforced concrete structural repair in the	
harbor, (2) technology to protect steel pipe and (3) technology of reinforced concrete structures by method of cathodic protection.	

3. Reference (History of the Cooperation)

This cooperation was kicked off at an occasion of the visiting of ITST at NILIM in TSUKUBA, May in 2010 with Vice Minister of MoT, Vietnam, when both institutes agreed to the Memorandum of the cooperation in the future scope, which means young and middle researchers be involved in the cooperation in order to keep communication continuously in a long term for making a knowledge network for mutual benefits.

2010.05 Tsukuba, Agreement on MoC (Vice Minister visited Tsukuba)

2010.09 1st Joint WS in Hanoi (Presentations in 5 fields including Port and Airport, Discussions to identification of the themes of the cooperation)

2011.02 2nd Joint WS in Hanoi / Ho Chi Minh / Da Nang WS (Joint Research in the branches of ITST, Drafting Roadmaps, Short Report on Hai Van Tunnel)

2011.06 Study Tour in Japan according to the Roadmaps

2011.07 3rd Joint WS in Hanoi (Presentations and Discussions, Thang Long Bridge and other topics)

2012.01 4th Joint WS in Hanoi (Weathering Test research added in the Roadmaps, Short Report on Thang Long Bridge Pavement Issue)

2012.06 Trilateral Workshop for the Interim Report in Tsukuba

(International Research and Promotion Division)