

# The 21<sup>th</sup> JOINT WORKSHOP HELD IN BANDUNG, Indonesia 17<sup>th</sup> to 19<sup>th</sup> September, 2018

Institute of Road Engineering in Indonesia (IRE) and NILIM have carried out joint research of road and traffic fields. PWRI is also participating in the joint research as a cooperater of NILIM.

The 21<sup>th</sup> Joint Workshop was held in Bandung, Indonesia on 17<sup>th</sup> to 19<sup>th</sup> September, 2018.

The activities of 21<sup>th</sup> Joint Workshop are as follows;

- 1) The presentation about Japanese tunnel technologies in the open seminar
- 2) Site visit on the road tunnel construction site
- 3) Discussion on tunnel and underground structures

## 1. Contents

### • The presentation about Japanese tunnel technologies in the open seminar

On 17<sup>th</sup> September, the open seminar was held. The purpose of the seminar was to introduce the tunnel research activities widely in Indonesia. Japanese researchers presented about Japanese tunnel technologies in the seminar.

Japanese researchers explained tunnel technologies about planning, design and construction to over 150 participants, such as government officials, engineers, staffs of private companies and universities, etc.

The seminar was started by the opening remark by Director of IRE, followed by the keynote speech by Director General of Highways of Ministry of Public Works and Housing.

Then, many presentation were made. Themes of presentations were the present condition, planning, technology trends of tunnel projects. Speakers were project managers of each project such as expressways, MRT Jakarta, construction companies and a lecturer of Pembangunan university, etc.

Many tunnel engineers of industry, government and academia in Indonesia took part in the open seminar.



Presentation in the open seminar

• Site visit on the road tunnel construction site

On 18<sup>th</sup> September, IRE and PWRI visited the construction site of road tunnel to see the actualities of the construction in Indonesia. This is the first case of full-fledged road tunnel in Indonesia, which is being constructed by a Chinese contractor.



Site visit on the road tunnel construction

• Discussion on tunnel and underground structures

On 18<sup>th</sup> and 19<sup>th</sup> September, IRE and PWRI researchers discussed about some themes.

• IRE and PWRI confirmed the contents of "Technical Guideline on Auxiliary Method for Mountain Tunnel" as the latest draft. The guideline is a product of joint research continuously carried out by IRE and PWRI.

• IRE and PWRI discussed future research activities. Researches about tunnel facilities and shield tunnel have been conducted. In this time, the discussion about tunnel facilities was especially made, and IRE and PWRI confirmed to work on the research of ventilation intensively.

• IRE is interested in the technology of lining concrete, therefore they requested to add some new research themes to the joint research as follows;

- Measuring method before the placement of lining concrete
- Construction method
- Countermeasures of defects in the maintenance stage

IRE and PWRI have agreed to conduct the research of these themes preferentially.



Discussion on 18<sup>th</sup> September



Discussion on 19<sup>th</sup> September

## 2. Reference (History of the Cooperation)

The National Institute for Land and Infrastructure Management (NILIM) and the Institute of Road Engineering (IRE) renewed cooperation arrangement in Indonesia, February 2014.

Under this agreement, NILIM and IRE have been continually sharing research information by jointly holding technical seminars and exchanging researchers to strengthen links between both research institutes and to form international human networks, thereby to contribute the growth of Indonesia.

2009.06	Pre-meeting in Jakarta and Bandung
2009.11	Tsukuba, Memorandum of Cooperation agreed
2010.03	Bandung, (1st Joint Workshop for targeting the themes)
2010.06	Tsukuba, joint meeting for Bali coming symposium
2010.10	International Symposium in Bali (2nd Joint Workshop to declare the strategy for cooperative researches)
2011.01	Jakarta, (3rd Joint Workshop to make the Road maps(1) )
2011.06	Sulawesi, (4th Joint Workshop to make the Road maps(2) and site observation
2011.09	Technical Tour in Japan for modernizing experimental Equipment and Facilities of RDCRB (IRE)
2011.10	Lombok, (5th Joint Workshop / Bilateral Seminar)
2012.03	Jakarta and Bandung, (6th Joint Workshop including River and Water Resource issue)
2012.06	Batam, (7th Joint Workshop (Bridge/ Tunnel) and Open Seminar (Long Span Bridge and Tunnel Technology))
2012.06	Trilateral Workshop for the Interim Report in Tsukuba
2013.01	Jakarta, (8th Joint Workshop (Road Environment/ IPT/ Traffic Safety/ Pavement/ Tunnel)
2013.08	Padalarang-Bandung, (9th Joint Workshop (IPT/ Traffic Safety/ Pavement/ Tunnel))
2013.11	Tokyo, (10th Joint Workshop (Tunnel/ Pavement))
2014.02	Jakarta, Labuan Bajo and Denpasar, (Cooperation Arrangement renewed, 11th Joint Workshop (Road Side Station of Corridor 5/ Road Environment/ IPT/ Tunnel/ Pavement)
2014.03	Tsukuba, (12th Joint Workshop (Michinoeki/ Pavement))
2014.10	Jakarta, (13th Joint Workshop (Tunnel))
2014.11	Bali, Flores and Buton, (14th Joint Workshop (Road environment/ Road Side Station/ AsButon)
2016.02	Tsukuba, (15th Joint Workshop and Site visit (Pavement/ AsButon/ Road Side Station)
2016.02	Jakarta, Buton Island and Bali, (16th Joint Workshop and Site visit (Michinoeki/ Traffic Data Collection/ Pavement/ Tunnel)

2016.11	Bandung, Jakarta, (17th Joint Workshop and Site visit (Road Environment)
2017.03	Bali, (18th Joint Workshop (Pavement)
2017.10	Tsukuba, Tokyo, (The mid-term Conference and Site visit (Various infrastructure facilities)
2018.2	Bandung, (19th Joint Workshop (Tunnel)
2018.3	Bandung, Bogor, (20th Joint Workshop and Site visit (Pavement)