# THE JOINT MEETING HELD TO CONFIRM THE RESEARCH ROAD MAP CONCERNING THE DECLARATION OF THE INTERNATIONAL SYMPOSIUM 2010

The join meeting for confirming the road maps on collaborative research projects related to the Declaration of International Symposium on Environmentally Friendly Road and Transport in Bali 2010 was held in Sulawesi, Indonesia from 31<sup>st</sup> May to 3<sup>rd</sup> June with IRE(RDCRB).

After presentations, discussions and observation at site, both of Indonesia side and Japan side (NILIM with sister organizations) concluded to confirm the road map(APPENDIX(1)) of AS-Buton (Indonesia natural rock asphalt) research project for environmental mitigation, which was identified in the Declaration for international research symposium in Bali 2010.10, being added to the other road maps(APPENDIX(2)) for Road environment (Motor cycle Co2 emission), Traffic survey( Image processing technology) and Tunnel and underground technology already agreed at the previous work shop held in Jakarta 26<sup>th</sup> January this year.

Both sides appreciate the vital importance of using local natural materials for environmental mitigation in public works in Indonesia, the environmental effects of which will be achieved through the reduction of energy being pored into public works. And the possibility of making use of AS-Buton for a base structural material of roads was also expected as the out put of the research project, which will contribute to improving road networks and infrastructures with lower costs.

And at this opportunity both sides reached to agree a road map for road safety research project determined as a joint cooperation in the joint work shop on 26<sup>th</sup> January as well. This project is to be conducted by the related JICA expert in Jakarta under supports of NILIM.



Note:IRE(RDCRB) Institute of Road Engineering(Reaearch and Development Center of Road and Bridge), Agency of Research Department, Ministry of Public Works in Indonesia

(International Research and Promotion Division)

## **Research Road Map for**

# "Asbuton (Indonesian Natural Rock Asphalt) Research Project

## to Environmental Mitigation"

1) Period

Three years from 2011 to 2013

- 2) Target of the year
  - 2011: Investigation of Asbuton material properties
  - 2012: Evaluation of pavement materials using Asbuton
  - 2013: Make-up the draft of the standards about Asbuton application
  - (\*X) Indonesia side has a vision of establishing the Asbuton Center

## **Research Road Map for**

# "Traffic Accident Black Spot countermeasures"

1) Period

Three years from 2011 to 2013

- 2) Target of the year
  - 2011: Data collection of traffic flow and traffic accidents of sample Black Spots
  - 2012: Trial countermeasures on sample Black Spots
  - 2013: Evaluation of countermeasures and Make-up of the Guidelines

Note: All activities planned in the road maps here will be conducted under the limitation of annual budgets of respective institutes. These are not the international agreement but respective institutes will make efforts, together with related researchers and organizations, so as to achieve the useful technological outcome.

## **Research Road Map for**

## **Guideline Development for Environmentally Friendly Road**

### 1) Objective:

The impact study of MC lane for the road capacity and the MC lane feasibility

The measurement of effectiveness of using MC in term of CO2 emission, capacity, and safety

Developing the possible resolution for Motorcycle utilization

#### 2) Scope of the Roadmap

CO2 emision of motorcycle (MC)

MC investigation in Indonesia in real operation

Investigation of fuel efficiency in spesific route using MC and 4 – wheel vehicle with indication function of fuel efficiency

Coordinate the real fuel efficiency with quantity of refueling

Providing detailed monitoring equipment for 4-wheel vehicle

Traffic Capacity of specialized lane for MC

Analyze traffic capacity and characteristics by video monitoring

Enhacing Japanese theory on traffic capacity

Evaluation on applicability of MC lane

Probability of electric vehicle application

Research of electric supplying system

Investigation on applicability of electric MC on traffic

Providing electric MC for testing

#### 3) Period of Research

Four years from 2011 to 2014

## **Research Road Map for**

# "Traffic survey methods using image processing technology (IPT)"

## 1) Objective:

To develop methods and guidelines that make it possible to efficiently observe road traffic, especially motorcycles, in Indonesia

#### 2) Scope of Roadmap:

2011: Conduct a feasibility study of the IPT

2012: Complete fundamental analyses to find out the limitations of using the IPT and identify the most appropriate traffic survey methods according to road types and traffic conditions

2013: Develop guidelines and disseminate the outcomes

# **Research Roadmap for**

# "Guideline Development for Tunnel and Underground Structure"

## 1) Objective

Developing technical guideline of tunnel construction through adoption of Japan guidelines, evaluation of experiment results by study and trial tunnel, dispatching experts

#### 2) Target of the year:

- 2011-12: Mutual understanding about state-of-the-art of various tunnel construction methods
- 2013: Implementation and evaluation of research relating to tunnel and underground structure
- 2014: Make –up of technical guidline by Indonesia side, supported by Japan side and workshop in Indonesia

Note: All activities planned in the road maps here will be conducted under the limitation of annual budgets of respective institutes. These are not the international agreement but respective institutes will make efforts, together with related researchers and organizations, so as to achieve the useful technological outcome.