e-Asia JRP
Transportation session summary

@JST Tokyo HQ

2014 Dec 13

Session chair; Ken Naono, Hitachi

Keynote: Prof. Yoshitsugu Hayashi

- “Understanding the Need for Infrastructure to Enhance Sustainability and Resilience according to the Stages of Economic Development, Urbanization and Motorization”
- Interaction between land use and transport is featured in the views of “Stages (Economic growth, Population change, and Ageing).”
- The discussion points are;
  - How to make land-use policy in conjunction with transport design?
  - How about implementing use-charge to cars?

Dr. Nguyen Trung Dung

- “Apply Intelligent Devices to Transportation System in Viet Nam”
- Problems in Viet Nam traffic are analyzed in detail and ITS importance is stressed.
- Use of “On Board Unit” and “Road Side Unit” devices, with GSM/GPRS ad-hoc network
- The discussion points are;
  - Power issues on vehicles and roads
  - Deployment to drivers

Dr. Hadijah Iberahim

- “Trade Facilitation: Issues and Challenges in Implementing Single Window System in Malaysian Port”
- Port international trade efficiency using EDI
- Case study on Port Klang Community System
- Discussion points are;
  - Relation to ASEAN economic integration 2015
  - Pursuing efficiency versus vulnerability from concentration

Mr. Toshio Okochi

- “Traffic Flow Monitoring and Management in Big Cities in Asia”
- Continuous monitoring of passenger flow and feedback to transportation
- Case studies from Hanoi, Singapore, and Tokyo
- Discussion points are;
  - Advantage of precise monitoring
  - Human flow from psychological effects, people characteristics changes (workers to patients)
  - Comparisons versus future propositions

Insights from other sessions

- **Keynote Lecture:** The Earth sciences are fundamental for intelligent infrastructures to tackle with the uncertainties and instabilities.
- **Urban/Regional Planning:** Correlations among infrastructures (energy/water/ICT/transport) are important to analyze the in-depth issues.
- **Water:** More detailed monitoring is essential for flooding, groundwater flows, reservoirs designs.
- **Power:** KPI consensus, such as balancing between national economy and local ecology, is critical to implement smart grid in realization stages.

Transportation Research Proposal Candidates

- <**Congestion root-cause analysis for multi-modal transportation system**> using ad-hoc networks and sensors for urban passengers in view of “Stage” concept with local/global and economical/ecological KPIs (fuel efficiency, reduction of CO2 emission, safety, maintenance, etc)
- <**Traffic pattern database development for urban and regional transportation system**> with land use policy
- <**Traffic flow visualization for ASEAN economic integration**> with use of EDI