

***International Workshop on  
Performance-based Infrastructure Asset Management  
ITU MACKA Facilities Istanbul, 6-9 July 2008***

**Hosted by Istanbul Technical University**

Supported by US-NSF, USDOT-FHWA, Turkish Infrastructure Agencies  
and Agencies from Canada, EC, Japan and Switzerland

3-6 July Participants arrive at Taslik Hotel and ITU facilities

***6 July 2008 (Sunday) DAY 0; 6:30 PM – Registration, Opening  
Ceremony and Reception at Istanbul Technical University***

Departure by bus from Taslik Hotel/ITU at 6:00PM

***7 July 2008 (Monday) DAY 1; 9:00 AM– Paradigms and Concepts  
Underpinning PBIAM:***

***Infrastructures and Sustainability: Where are we today?***

1. Overview: Infrastructure Systems and Integrated Asset  
Management (F. Moon)

***Economic and Engineering Considerations:***

2. Policy, Planning, Financing and Revenue (Meyer)

3. Lifecycle Benefit/Cost in Transportation (Frangopol)

4. State-of-the-practice in Multi-hazards Considerations for Asset  
Management (Yen)

***Societal Considerations:***

5. Societal Institutions, Organizational Systems and Individuals  
(Comfort)

***Ecological Considerations:***

6. Sustainability and Infrastructures (Montalto)

***12:30 LUNCH – “Why there are really no asset management research  
needs?!?!” (Gurian)***

***14:00 Infrastructures and Sustainability: Vision for Future***

7. Resilience and Sustainability of Infrastructure Assets through Risk-  
Based Adaptive Incremental Revolution (Haimes)

8. European Research on Sustainability and PBIM (Wenzel)

9. Japanese Research on Health Monitoring of Sustainable  
Infrastructures (Fujino)

10. Lifecycle engineering aspects of the Bosphorus Tube Crossing  
(TBA)

***16:00 BREAK***

**16:15 – 17:30 PANEL DISCUSSIONS:**

11. Presentation and discussion of Straw-Person **Ontology** (Ontology Committee)
12. Necessary elements of an international research agenda as inspired by the presentations (Drs. Catbas and Ghandehari)

**19:00 Departure from Taslik Hotel/ITU for DINNER (Boat Trip)**

**8 July 2008 DAY 2 – 9:00 AM**

***PBIAM: Current State of Applications and Research Needs***

13. Asset Management in the **USA** (Ghasemi)
14. Asset Management in the **Netherlands** (Klatter)
15. Asset Management in **Japan** (Kaneuji)
16. The **Canadian** perspective on Asset Management (Wade)

11:00 BREAK

11:15

17. PBIAM Experience on Alpine Motorways in **Italy** (Mordini)
18. Planning for the Turkish Highway Infrastructure of 2050 (TBA)
19. Critical Arteries of **Istanbul's** Transportation Infrastructure and Management Needs (TBA)

13:00 LUNCH – Progress Report on Workshop Objectives;

14:00

***20. Infrastructure Performance Measures Panel Discussions (Focus on Highway Transportation and Intersections with other Transportation Modes, Water, Power, IT infrastructures)***

***Intro to System-Wide Performance Measures*** Aktan et al

***Societal Domain:*** Womack (Chair) and Lowdermilk (Facilitator)

***Natural Domain:*** Montalto (Chair) and Gurian (Facilitator)

***Engineered Domain:*** Celik (Chair) and Aktan, H (Facilitator)

16:00 Departure for SUSPENSION BRIDGE VISITS

18:00 Conference DINNER at ORTAKOY:

DISCUSSION: How differences in human systems impact infrastructures?  
(Wenzel, Fujino, Mollaghasemi, Tasdemir, Tankut)

***DAY 3 - Planning for Future Activities and Conclusions:***

**8:00 AM**

***Research Agenda and Ontology Committee's Meet to prepare for PANEL presentations over breakfast***

**10:00 AM**

**21. FHWA LTBP Program Information Session**

**H. Ghasemi, Chair**

Overview of the LTBP Research Agenda (Maher, Aktan, Gomez, Halling)  
Opportunity for International Collaborations (Panel: Ghasemi, Aktan, Wenzel, Fujino, Feltrin, Wade, Tasdemir)

12:30 LUNCH: Progress Report and Future Activities

13:30 PANEL PRESENTATIONS and CONCLUSIONS

**22. Presentation of Updated Ontology and Discussion**

Future Activities for Completing and Maintaining the Ontology  
(Ontology Committee)

14:30 BREAK

15:00

**23. Presentation and Discussion of a Preliminary International Research Agenda (Drs. Catbas and Ghandehari):**

Domain knowledge needs;

Corresponding data and information needs;

Tools and research infrastructure needs for data and information collection;

How to leverage existing data/information?

Research needs for data interpretation for knowledge;

Research needs for preserving and leveraging legacy heuristic knowledge and experience;

Country/Culture-specific issues in education and preserving wisdom/experience;

Future activities needed for completing a research agenda and launching international PBIAM research;

17:00 CLOSING OF THE WORKSHOP

## LIST OF PARTICIPANTS

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Many additional participants from academe, government agencies and industry TBA		