e-ASIA Joint Research Program International Workshop on Intelligent Infrastructure

Theme

An advanced interdisciplinary research towards innovation

Description

Urban safety and urban management are the most challenging ones to any country in the world. The theme of this workshop "Intelligent Infrastructure" is concentrating on potential solution strategies of urban problems.

As population grows, human factors of the urban system increase exponentially because people interact. Artificial intelligence has been a tool to solve such non-polynomial order problems, thus the need for science of intelligent infrastructure. There are three types of intelligence which will innovate infrastructure. The first is "static intelligence" to optimize inefficient parts of the existing infrastructure while keeping the existing hardware as it is. The second is "dynamic intelligence" to optimize the infrastructure by equipping it with such new hardware as sensors, computers, and controllers. The third is "cumulative intelligence" to optimize the infrastructure over tens of years. The best solution at a moment will not necessarily be the best in a long run.

In this workshop, we organize the approach to ultimate intelligent infrastructure into four sections: (1) surveying and analysis, (2) modeling and simulation, (3) optimization, (4) implementation. We hope this holistic interdisciplinary approach will contribute to both innovating infrastructure in ASEAN countries as well as in Japan, and innovating science of infrastructure for the entire world.

The workshop brings academicians, researchers from academic society, industry and government sectors with different background together on the ground of intelligent infrastructure to discuss current issues which are threatening infrastructure planning and management; to share knowledge, experience and innovation among the members of e-ASIA Joint Research Program and to review on current trends and important future directions of Joint Research Program to optimize the effort.

Myanmar Science and Technology Research Department (MSTRD) and Yangon Technological University (YTU) of Ministry of Science and Technology are proud for having opportunity to co-organize the e-ASIA Joint Research Program "International Workshop on Intelligent Infrastructure" with Japan Science and Technology Agency. We do hope outcomes of this workshop will bring future fruitful research collaboration among the member countries for the benefit of the many.

Organizing Committee e-ASIA Joint Research Program "International Workshop on Intelligent Infrastructure" November, 2013