

7th Asia Construction IT Round-Table Meeting

Ryosuke Shibazaki, Chair
KyoYuk Munhwa Hoekwan Hotel, Seoul, Korea

2011-6-28, 29

Studio Chronicle 1940-1948 **7th Asia Construction IT Round-Table Meeting,**
2011-6-28, 29
Seoul, Korea
“Droft” Meeting Minutes

1. Welcome Message

Prof. Shibazaki, chair of the meeting welcomed the participants.
Mr. Park, Ha-Joon, Director of MLTM and Mr. Lee Kyo-Sun, vice president of KICT welcomed the participants. Prof. Yabuki and Mr. Kadomatsu described thanks message to MLTM and KICT. And all other participants introduced themselves briefly.

2. Adoption of Agenda

The agenda (as follows) was adopted by unanimous consent.

Agenda of “7th Asia Construction IT Round-Table Meeting, 2011-6-28, 29

Tuesday, June 28,

- 9:30 Opening and Welcome addresses from MLTM, KICT, JSCE and JACIC
9:50 Introduction of participants
10:00 Review the last meeting and confirmation of the agenda
10:10 Review for on-going projects
ACIT Home page, Comparison Table and Data Book (Mr. Kawanai)
10:20 Introduction of KICT (Ms. Yoon)
10:40 National Reports 6
Korea (Mr. Kim Jin-Uk), China (Mr. Hao), Japan (Dr. Akiyama),
India (Prof. Anantha Narayanan), Taiwan (Prof. Leu), Hong Kong (Prof. Lu)
(12:30 Lunch Break with Group photos)
13:30 Session 1 Automation in Construction
• Construction automation projects in KICT (Dr. Kim Kyoon-Tai)
• Machine Control/Machine Guidance in Japanese Construction (Prof. Yabuki)
• Intelligent generation of BQ from IFC data subject to Chinese standard
(Prof. Ma)
• Automation in the onshore OIL & PIPELINE construction
(Prof. Anantha Narayanan)
(Coffee Break)
16:00 Session 2 The Great East Japan Earthquake
• Reports from the damaged area (Prof. Minagawa)
• Spatial Information contribution (Prof. Shibazaki)
• Short Report for Supporting Reconstruction of Great East Japan
Earthquake (Prof. Tanaka)
• The earthquake mechanism and rapid reconstruction cost estimation tool
(Mr. Kaidu)
17:30 Closing of the day
18:00 Welcome reception

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Wednesday, June 29,

9:00 Session 3 Building Information Modeling (BIM) (Moderator: Prof. Kim Inhan)

- BIM Adoption Status in Korea (Prof. Kim Inhan)
- Short presentation from participants
Prof. Lee Sang-Ho (Korea), Prof. Lee Ghang (Korea), Prof. Choo (Korea),
Prof. Ma (China), Prof. Yabuki (Japan), Prof. Anantha Narayanan (India),
Prof. Leu (Taiwan), Prof. Lu (Hong Kong)
- Discussion
- Application of BIM in the Buildlive competition (Mr. Imaizumi)

(12:00 Lunch Break)

13:00 Session 4 Construction IT

- Intelligent system for urban infrastructure (Dr. Lee Sang-Hoon)
- Application Test of RFID for Building Material Information Management
(Dr. Han Choong-Han)
- IFC-based bridge information model and its application to asset management
(Prof. Lee Sang-Ho)
- IDM/MVD development methodology for Evacuation in High-rise Buildings
(Prof. Choo Seung-Yeon)
- Robotic Tower-based Automated Steel Construction (Prof. Lee Ghang)
- The Development and Applications of Construction IT in Taiwan (Prof. Lew)
- Research agenda of BIM in a real estate and construction department (Prof. Lu)

15:30 Wrap up the Meeting by the chair

16:00 Closing of the meeting

3. Review for on-going projects

Mr. Kawanai introduced the ACIT Home Page , Comparison Table and Data Book.
All participants should check and revise the comparison table. And India should
make own part of the comparison table during meeting.

4. Introduction of KCIT

Ms. Yoon introduced KICT with the contents of Who we are & What we do, Major
research project, International Activities.

5. National Reports

- Mr. Kim Jin-Uk gave a presentation of "Construction IT in Korea".
The GDP-to-Construction investment ratio is 11-17%, constant for last 3 years.
And the private contract amount account for 65%.
The Web camera assists construction site, and the asset management system
informs the public facilities.
- Mr. Hao gave a presentation of "Advance of new e-government system of the China
MHURD"
Social panic with surging house price: Investment 95%
So, the China MHURD decided to establish the Housing Information System, and
put into operation by November this year.

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- Dr. Akiyama gave a presentation of “Construction IT in Japan -National programs-”.
Dr. Akiyama reported about “CALIS/EC Initiative”, “Innovation Promotion Scheme”, “GIS Promotion”.
- Prof. K. Anantha Narayanan gave a presentation of “Indian Construction Industry”
Prof. Anantha Narayanan reported about “Indian Industry”,
“Construction Infrastructure”, “Information Technology”, “e-Procurement”.
- Prof. Sou-Sen Leu gave a presentation of “Leading National Construction IT Programs in Taiwan”
- Prof. Lu Wilson gave a presentation of “Construction informatics -A regional report of Hong Kong”.

6. Automation in Construction

- Construction automation project in KICT (Dr. Kim Kyoon-Tai)
Dr. Kim Kyoon-Tai reported about “Pipe Manipulator”, “Road Strip Removing”, “Intelligent Excavation System”, “Curtain Wall Cleaning System”.
- Machine Control/Machine Guidance in Japanese Construction (Prof. Yabuki)
Prof. Yabuki gave a presentation of “3D DATA for Machine Control & Machine Guidance in Construction”.
- Intelligent generation of BQ from IFC data subject to Chinese standard (Prof. Ma)
Prof. Ma reported about “Generate BQ items”, “Quantity take-off of BQ items”, “Verification and conclusion”.
- Automation in the onshore Oil & Pipeline construction (Prof. Anantha Narayanan)
Prof. Anantha Narayanan reported about “TIE IN JOINT ACTIVITIES”,
“DURATION OF ACTIVITIES”, “PRODUCTIVITY AND SIMULATION MODEL”,
“NEED FOR AUTOMATION”.

7. The Great East Japan Earthquake

- Reports from the damaged area (Prof. Minagawa)
Prof. Minagawa reported about “SUMMARY OF SEISMIC MOTION AND TSUNAMI”, “SOME STATISTICS (dead/missing persons, land subsidence, inundation area)”, “SITE VISIT REPORT”, “FROM RECOVERY TO RECONSTRUCTION”.
- Spatial Information contribution (Prof. Shibazaki)
Prof. Shibazaki gave a presentation of “Activities of geospatial information community for a catastrophic disaster, East Japan Earthquake 3.11”.
- Short Report for Supporting Reconstruction of Great East Japan Earthquake
(Prof. Tanaka)
Prof. Tanaka gave a presentation of “3D-CAD Data using Laser Profiler”.
- The earthquake mechanism and rapid reconstruction cost estimation tool (Mr. Kaizu)
Mr. Kaizu gave a presentation of “Over view of the 2011 off the Pacific coast of Tohoku Earthquake and introduction of Photog-CAD”.
Mr. Kaizu reported “Jacic’s support of recovery form 3.11 Earthquake and Tsunami”, “Photog-CAD”.

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8. Building Information Modeling(BIM)(Moderator: Prof. Kim Inhan)

- BIM Adoption Status in Korea (Prof. Kim Inhan)
Prof. Kim gave a lead presentation and reported about “Open BIM Concept-Facility Life Cycle, Software, Information Convergence”, “BIM Implementation Strategies”, “BIM Implementation Cases in Korea”, “BIM Activities in Korea”.
- Prof. Lee Ghang, Prof. Choo, Prof. Lee Sang-Ho gave a presentation of BIM Adoption Status in Korea”.
- Prof. Ma gave a presentation of “Answer to BIM Related Questions”,
- Prof. Yabuki gave a presentation of “Answers to the Questionnaire BIM Special Session”.
- Prof. Anantha gave a presentation of “Building Information Modeling(BIM)”.
- Prof. Leu gave a presentation of “Building Information Modeling and Its Implementations in Taiwan”.
- Prof. Lu gave a presentation of “Answer to BIM Related Questions”,
Prof. Kim Inhan made the table from each answers.
- Case studies of BIM-Build Live Competition; Mr. Imaizumi (Forum8)
Mr. Imaizumi reported about “FORUM8 Company profile”, “FORUM8 Design Festival 2010-3Days”.

9. Construction IT

- Robotic Tower-based Automated Steel Construction(Prof. Lee Ghang)
Prof. Lee reported about “Robotic Tower Crane System”, “Robotic Crane Project”, “Intial Goal-Development of a fully automated robotic tower crane-”.
- Intelligent management system for urban infrastructure(Dr. Lee Sang-Hoon)
Dr. Lee Sang-Hoon reported about “Urban Computing Efforts in Korea”, “Urban Infrastructure Management”, “Intelligent Urban Facility from KICT”, “Testbed for Intelligent Facility”.
- Application Test of RFID for Building Material Information Management
(Dr. Han Choong-Han)
Dr. Han Choong-Han reported about “RFID Tag Test for Building Materials”, “Result of Measuring Recognition Rates”, “Test of Building Materials in 900MHz”, “Test for FRID Tag at Construction Site”.
- IFC-based bridge information model and its application to asset management
(Prof. LeeSang-Ho)
Prof. Lee Sang-Ho reported about “IFC-based Bridge Information Model”, “Application Examples in Civil Infrastructure Domain”.
- IDM/MVD development methodology for Evacuation in High-rise Buildings
(Prof. Choo Seung-Yeon)
Prof. Choo reported about “open BIM definition”, “Definition of IDM& MVD”, “Development of IDM/MVD through Hige-rise Building evaluation code”.
- The Development and Applications of Construction IT in Taiwan(Prof. Lew)
Prof. Lew reported about “Integration Types”, “Example of Inside Application”,
- Research agenda of BIM in a real estate and construction department(Prof. Lu)

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10. Wrap up the Meeting by the chair

Chair summarized this meeting.

Topics for the next ACIT are as follows.

- BIM?
- Construction automation?
- Implementation strategy?
- Legal issues, national standards (harmonization?)
- New social demand (“green building”, “low carbon city”, smart grid, smart city etc.)?
- Sensor data integration?

11. Future Meetings

Prof. Lu proposed the next Meeting in Hong Kong and he and JACIC shall discuss the next Meeting. 8th ACIT Meeting will be in 2012.

Closing of the meeting

7th Asia Construction IT Round-Table Meeting

June 28-29, 2011

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Participant List

- Mr. **PARK, HaJoon**; Director, Technology and Safety Policy, MLTM, **Korea**
Mr. **YANG, Seung Jin**; Technology and Safety Policy, MLTM, **Korea**
Mr. **LEE, Kyo-Sun**; Vice President, KICT, **Korea**
Mr. **KIM, Jin-Uk**; Director, Construction Information Research Division, KICT, **Korea**
Dr. **LEE, Sang-Ho**; Professor, Dept. of Civil & Environmental Engineering, Yonsei University, **Korea**
Dr. **KIM, Inhan**; Professor, Dept. of Architecture, Kyung-Hee University, **Korea**
Dr. **MA, Zhiliang**; Professor, Dept. of Civil Engineering, Tsinghua University, **China**
Mr. **HAO Li**; Deputy Director, Information Center, Ministry of Construction, **China**
Dr. **K. Anantha Narayanan**; Associate Professor, Dept. of Civil Engineering, Indian Institute of Technology Madras, **India**
Dr. **LEU, Sou-Sen**; Professor, Dept. of Construction Engineering, National Taiwan University of Science and Technology, **Taiwan**
Dr. **LU Wilson**; Assistant Professor, Department of Real Estate and Construction, The University of Hong Kong, **Hong Kong**
Dr. **SHIBASAKI, Ryosuke**; Professor, Center for Spatial Information Science, University of Tokyo, **Japan**
Dr. **YABUKI Nobuyoshi**; Professor, Division of Sustainable Energy and Environmental Engineering, Graduate School of Engineering, Osaka University, **Japan**
Dr. **MINAGAWA Masaru**; Professor, Dept. of Engineering, Tokyo City University, **Japan**
Dr. **TANAKA Shigenori**; Professor, Faculty of Informatics, Kansai University, **Japan**
Mr. **KADOMATSU Takeshi**; President, Japan Construction Information Center, **Japan**
Dr. **AKIYAMA Minoru**; Director, Standard Dept., JACIC, **Japan**
Mr. **KAIZU Masaru**; Director, Advanced Business Solution Research Dept., JACIC, **Japan**
Mr. **KAWANAI Yasushi**; Senior Researcher, Standard Dept., JACIC, **Japan**
Mr. **IMAIZUMI Jun**; VR Support group, Forum8 Co. Ltd., **Japan**
Dr. **HAN, Choong-Han**; Research Fellow, Construction Information Research Division, KICT, **Korea**
Dr. **KIM, Kyoon-Tai**; Senior researcher of Construction Management & Economy Research Division, KICT, **Korea**
Dr. **LEE, Sang-Hoon**; Senior researcher of Ubiquitous, Land Implementation Research Division, KICT, **Korea**
Dr. **CHOO, Seung-Yeon**; ; Professor of KyungPook Natinal University, **Korea**
Dr. **LEE, Ghang**; Professor of Yonsei University, **Korea**

Observers

- Mr. **KIM Seong-Sig**; Senior researcher, Construction Information Research Division, KICT, **Korea**
Ms. **YOON Hoi-Su**; Researcher, Construction Information Research Division, KICT, **Korea**
Mr. **QIU Shixun**; Manager, Research Center, Glodon Software Co., Ltd., **China**
Mr. **JIN Jin**; Engineer, Research Center, Glodon Software Co., Ltd., **China**
Mr. **YAMAKI Satoru**; Senior Researcher, Construction Cost Research Dept., JACIC, **Japan**
Dr. **OH Eun-Ho**; Senior Researcher Construction Management & Economy Research Division, KICT, **Korea**
Mr. **Seo Myoung Bae**, Researcher, Construction Information Research Division, KICT, **Korea**
Mr. **MOON, Jin Seok**, Researcher, Construction Information Research Division, KICT, **Korea**
Dr. **SEO Jong-Cheol**, Research Professor, Dept. of Architecture, Kyung-Hee University, **Korea**
Mr. **CHOI, Jung-Sik**, Senior Researcher, Dept. of Architecture, Kyung-Hee University, **Korea**
Mr. **PARK Seung-Hwa**, Senior Researcher, Dept. of Architecture, Kyung-Hee University, **Korea**