The 19th East Asia Round Table Meeting Summary Minutes (draft)

Date: Thursday, 1 September 2016 Time: 9:00-12:00 Venue: Shika, Hotel Nikko Fukuoka Attendees: A list is attached

1 Greetings by EAJ President

Prof. Abé, EAJ President welcomed all at the 19th roundtable meeting.

2 Symposium Review

Prof. Mishima summarized the gist of the symposium on the previous day and invited comments. Discussion highlighted the importance of "IoT and new technologies like a sensor as factors to push forward advanced maintenance", "fostering skilled workers with moral awareness and expert knowledge to properly employ technologies" and "international cooperation among three countries". There was also a comment that monitoring technique changed the concept of manufacturing and that "maintenance" will be in the future a main-stream industry and not a part of manufacturing.

3. Confirmation of the Minutes of the 18^{th} EA-RTM in Wuhan

Dr. Koizumi encouraged the attendees to review the minutes of the RTM last year and to point our necessary amendments by the end of this RTM. At the end of the RTM, the minutes were duly approved without any comments.

4. Information Exchange on Academy Activities

Representing EAJ, Dr. Nagai gave a comprehensive picture of the organizational structure and activities, which included changeover of the Committee on International Affairs to project-based Steering Committees. He also referred to a newly established "New Core Project" that focuses on 5 themes. It is the first top-down project while Projects are basically bottom-up. His explanation continued that among the Projects, "Young Section" as an active body had already been launched by those of 45 years old and younger. About 3 members are working in it. Regarding the membership, EAJ focuses on increase of female and industry members, establishment of a new membership for younger generation and admittance of eligible candidates regardless of nationality. "There was a suggestion of having a presidential meeting among three academies in the near future.

Representing CAE, Mr. Kang explained about activities and challenges centering on their two main tasks as a national honorary and consultative academic institution: increase of membership (female, industry and foreign members) and development of strategic studies to support government policymaking. With reference to "Made in China 2025" in comparison with other manufacturing-oriented initiatives like "Manufacturing innovation 3.0 Strategy, Korea", "White Paper on Manufacturing Industries, Japan", "Advanced Manufacturing Partnership, US", "Industrie 4.0, Germany", "Manufacturing Foresight Study, UK" and "Make in India, India", "Society 5.0, Japan" that sets a final goal as human well-being was also introduced..

Representing NAEK, Prof. S. Park provided a briefing about the recent activities. NAEK is more focused on future generations. YIPL (Young Intellectual Property Leaders)-Young Engineers Honor Society encourages students to consider how they should contribute to the society making the most of their expertise and provides educational outreach efforts for children, mainly in Seoul City, with support of companies. He also reported on the "Disruptive Innovator Award" targeting innovative business models or thriving-on challenges. Korea-ASEAN Engineering Forum, which is an industry-oriented activity to strengthen ties with ASEAN countries, counted the fourth. AAET is the counterpart.

5. Discussion on the Joint Survey on "Advanced Maintenance"

Prof. Mishima reported the result of the survey showing a line graph for each question for distributive analysis. Since some data were incorrectly shown, questions against these points were raised. It was stated that such problems will be corrected in the final report.

An issue was raised by CAE how we should utilize the results of the symposium and joint survey. EAJ proposed that the three academies would jointly send out a message on what we found from the symposium and survey, and three academies reached consensus on it.

N.B. This agenda item was temporarily postponed and resumed after item #6.

6. Proposal on the 20th EA-RTM by NAEK

Prof. S. Park announced that the 20th RTM is scheduled for 27-29 September 2017, but that the venue and theme were open for comments from China and Japan.

For the basis of discussion, he presented a slide on common issues in key policies of three countries and paper to explore next step cooperation based on the 20 years of significant exchange between NAEK, CAE and EAJ. NAEK provided three angles of "Economy-Industry-Technology", "Low Birth Society" Rate -Ageing and "Environment-Energy" with key issues. There were comments as follows: too broad a topic should be avoided; a topic that would allow people from different areas to join discussion is ideal; the ultimate goal should be human well-being and a better society; Smart Engineering that combines Engineering and Society could be an option. Three academies are expected to reach consensus on venue, theme and an executable plan within 3 months.

Close of a meeting.

List of Attendees:

The Engineering Academy of Japan (EAJ)	
ABÉ Hiroyuki	President, EAJ
KOIZUMI Hideaki	Executive Vice President, EAJ /Hitachi Fellow, Hitachi., Ltd.
TANIGUCHI Isao	Vice President, EAJ /President, KOSEN, National Institute of Technology
NAGAI Kotobu	Associate Executive Director, EAJ /Senior Scientist, Research Center for Structural Materials, NIMS
MISHIMA Nozomu	Chair, EA-RTM Steering Committee, EAJ /Professor, Akita University
ICHIKAWA Naoki	Director, Advanced Manufacturing Research Institute, AIST
TANAKA Hideo	Associate Executive Director and Secretary General, EAJ
YAMADA Sunao	Member, the Board of Directors, EAJ /Professor, Kyushu University
TANAKA Miyuki	Deputy Secretary General, EAJ
WATANABE Miki	Staff Secretary, EAJ
The Chinese Academy of Engineering (CAE)	
ZHAO Xiangeng	Vice President, CAE
OU Jinping	Member, CAE /Professor, Dalian University of Technology
DU Yanliang	Member, CAE /Vice President, Shijiazhuang Tiedao University
CHEN Xuedong	Member, CAE /President, Hefei General Machinery Research Institute
KANG Jincheng	Director-General, Department of International Cooperation, CAE
HAN Qingkai	Professor, Dalian University of Technology
ZHAO Weigang	Professor, Shijiazhuang Tiedao University
ZHU Jianxin	Director, Scientific R&D Department, Hefei General Machinery Research Institute
GAO Yang	Assistant Professor, Shijiazhuang Tiedao University
DENG Erhu	Program Officer, Department of International Cooperation, CAE
The National Academy of Engineering of Korea (NAEK)	
KWON Oh-Kyong	Executive Vice President, NAEK /HYU Distinguished Professor, Hanyang University
PARK Seungbin	Chair, International Affairs, NAEK /Vice President, KAIST
CHANG Sukgwon	Member, International Affairs, NAEK /Dean, School of Business, Hanyang University
LEE In Keun	Member, NAEK /Head, Land and Housing Institute, Korea Land and Housing Corporation
PARK Changwoo	Professor, Seoul National University
KIM Narai	Administrator for International Affairs, NAEK

The Engineering Academy of Japan (EAJ)