Date: April 20, 2017 Venue: ANGKOR PARADISE HOTEL, Siem Reap, the Kingdom of Cambodia Participants: Listed in the Appendix

The 4th Scientific Advisory Council (SAC) Meeting of the e-ASIA Joint Research Program

Minutes of the Meeting

Opening

• The meeting was attended by SAC members from six out of thirteen countries represented by Member organizations of the e-ASIA Joint Research Program (hereunder referred to as the "Program") namely: the Kingdom of Cambodia, Indonesia, Japan, the Republic of Philippines, the Kingdom of Thailand, and the United States of America. Also in attendance were the Program Secretary General, Secretariat and administrative staff from the Kingdom of Cambodia, Indonesia and Japan. A list of the participants is attached to the Minutes as Appendix.

• Opening Remarks were made by Prof. Teruo Kishi, Program Director and current SAC Chair, Japan Science and Technology Agency (JST), Japan.

• Greetings and self-introduction were made by the SAC members and the participants of each Member organizations.

• Brief overview of the Program and the Role of the SAC were presented and confirmed by the Secretariat (Mr. Yoshihide Kobayashi).

• The selection of the 2nd SAC Chair and the Vice Chair was discussed. As proposed by the Secretariat, Prof. Teruo Kishi and Dr. Chanwit Tribuddharat were appointed by consensus as the Chair and the Vice Chair for the 2nd SAC term (2017-2019), respectively. The new Chair and the Vice Chair made a brief inauguration speech, which was appreciated by the participants.

•As the host of the 4th SAC meeting, Dr. Bun Sreng (Ministry of Health (MOH), Cambodia) made an introductory presentation on "The Situation of Communicable Diseases in Cambodia". The death rate of small children (under 5 years old) due to communicable diseases has been tremendously decreased by 70% in these 15 years, but still needs further enhancement effort in both human resources and investment. The importance of the e-ASIA Program contribution to improve the situation was emphasized by a few SAC members in the Q&A session.

Updates and Review Session

1. Updates on the Past Activities after the 3rd SAC Meeting (presented by the Secretariat)

• National Health and Medical Research Council (NHMRC, Australia) and Thailand Research Fund (TRF, Thailand) were newly joined to the Program.

• 10 SAC members for the 2nd term were introduced, including two newly appointed members (Dr. Reynaldo V. Ebora, DOST, Philippines and Dr. Chanwit Tribuddharat, NSTDA, Thailand).

- Program activities including a workshop held after the 3rd SAC Meeting were explained.
- Updates on ongoing research projects and the 6th Call for Proposals were summarized.

2. Review of the 3rd SAC Meeting (presented by the Secretariat)

• The minutes of the 3rd SAC Meeting was briefly reviewed. Dr. Villar pointed out that the position status of Dr. Rowena Cristina L. Guevara, the former SAC member of DOST, Philippines, was not Executive Director but Undersecretary. The meeting minutes will be corrected.

3. Report on the 5th Annual Board Meeting (presented by the Secretariat)

• The minutes of the 5th Annual Board Meeting was briefly reviewed. For future project topic discussion, Prof. Kishi emphasized the importance of ICT such as big data analysis and AI.

• Dr. Villar asked if SAC can make a comment on the Board Meeting decision. The Secretariat answered that SAC can provide opinion to the Board.

• Dr. Ira confirmed who can be the member organization of the Program from the participating countries. The Secretariat answered that only public funding agency, not a research organization, becomes a member organization and can appoint a SAC member. Dr. Chanwit exemplified that NSTDA has both missions.

Discussion Session

4. Report on the Revised SAC TOR and the Revised Program Statute (Discussion on the Number of SAC members per Country)

• The Secretariat at first explained the discussion progress of the topic. At the 4th Annual Board Meeting in 2015, the Board agreed each member organization can nominate an SAC member and multiple SAC members from one country are acceptable. However, at the 3rd SAC Meeting in 2016, a strong concern having too many SAC members was brought up because of the difficulty to reach a consensus conclusion in SAC meetings. This SAC concern was conveyed to the 5th Annual Board Meeting in 2016, but in fact there were two different opinions among the Board members at the meeting, supporting either single SAC member per country or multiple SAC members per country. The Board decision was to keep the relevant part of TOR of SAC as agreed in the 4th Annual Board Meeting and to request SAC to come back to the 2017 Board Meeting with more rationale for a single SAC member per country. • The Chair (Prof. Kishi) reiterated the discussion point to the SAC members, and asked for their opinions to come back to the Board.

• Dr. Morens expressed his strong concern with the difficulty of meeting management if we have 18 SAC members at an annual one-day meeting, while he understood the necessity of collecting opinions from every member organization as well. He proposed to establish a formal process to get input from all member organizations. A scientific advisory group committee meeting as a subset of the SAC can be a good example to invite more voices from the member organizations. The subset meeting members can be changed every year from a practical viewpoint.

• Dr. Chanwit echoed to Dr. Morens, that SAC member should be one per country while asking for opinions to all member organization is important as well.

• Dr. Ira stated that she had a pre-meeting before coming to the SAC to summarize opinions in the country.

• Dr. Bun stated that no alternative SAC member can be assigned in his country because only he knows about the Program details, and we need clear identity.

• Dr. Villar supported the "single SAC member per country" proposal with the alternative appointment option in case when discussion topics or proposal reviews can't be covered by the appointed SAC member.

• The Secretary General (Mr. Masaki Sato) clarified that SAC members do not have to evaluate research proposals in the Program. Also, he stated some member organizations (ex. JST) do not want to assign SAC member alternatives.

• Prof. Kishi stated that the Board decision was understandable to cover a wider range of scientific experts, but on the other hand it would not be easy to reach an agreement with too many SAC members. Since we had several absent members in this SAC meeting, he proposed to continue the discussion by inviting more inputs from all SAC members again before the next Annual Board Meeting. Also, he proposed to agree with "Observer" attendance if the official SAC member can't cover relevant discussion topics.

• Dr. Chanwit proposed each member country to have a pre-meeting before annual SAC meeting to summarize the opinion within the country and to send the official SAC member to represent the whole country.

• Dr. Ira showed a concern if we would be able to have a good consensus in the pre-meeting with many experts from a variety of scientific areas.

• Finally, the Secretariat summarized the SAC conclusion of this topic as follows ;

- 1) SAC members can obtain inputs from other experts prior to annual SAC meeting to cover broader area of expertise.
- 2) If there are multiple member organizations in one country, SAC member of that country should have a pre-meeting before annual SAC meeting with in-country member organizations to collect inputs from other in-country member organizations and cover

broader fields of expertise.

- 3) SAC agreed to attend SAC as "Observers" if the official SAC member can't cover specific area of science and technology to be discussed in SAC meeting.
- 4) There was a suggestion to assign alternative experts of official SAC members officially as needed.
- 5) SAC agreed to continue the discussion by requesting absent members from this SAC meeting to give inputs to the Secretariat.
- 6) The Chair (Prof. Kishi) will report this conclusion to the next annual Board Meeting.

5. Discussion on Priority Topics for Future Collaboration

• Each SAC member made a brief presentation on potential research topics for future collaboration in the Program. For detail of the potential research topics proposed by the SAC members, please see the attached document.

· Dr. Morens commented on the effectiveness of nano-technology even for infectious diseases.

• Prof. Kishi emphasized the discussion importance on anticipated problems of AI, IoT and big data technology. An intensive workshop on this topic was suggested.

• The Secretary General pointed out that we need to confirm funding opportunity for commercialization and industrialization.

• The Secretariat requested again to all SAC members to fill in the previously given template with their proposed research topics and to send it to him through e-mail later. The overall proposals result will be summarized and distributed by the Secretariat.

6. Discussion on the Final Reports and the Progress Reports

•5 Final Reports and 6 Progress Reports were being shared with all SAC members. Scientific advisory comments to each report by SAC members were requested at the 5th Annual Board Meeting.

Prof. Kishi made comments on the below two projects;

#1) Corrosion mapping is a hot area and very useful for automotive coating technology. Good example of successful international joint research. Need to continue the project by inviting automotive manufacturers.

[#1 Project Title: Corrosion Mapping of Structural Materials in Asian Area with Understanding Effects of Environmental Factors]

#2) The project target was not achieved. SERS is a new technology and needs continuous effort.

[#2 Project Title: Plasmonic Bio-Sensor for Detecting Serious Diseases in Southeast Asia]
Dr. Villar asked about the research contract on material transfer in each joint research project. The Secretariat responded that Joint Research Agreement which includes contract on material transfer is handled by each research organization, not by the Program

Secretariat.

• Dr. Chanwit stated that the current project term (3 years) is too short for research completion. The Secretariat received similar opinion from some PIs. Dr. Morens stated that one of the Program value is to connect people working together in an international joint research project.

• Dr. Ira described about a unique funding system in Indonesia, showing a concern with continuous funding support to the projects #7, #8 and #9 through the research period.

[#7 Project Title: Whole-Genome Sequencing of drug-resistant Mycobacterium tuberculosis strains]

[#8 Project Title: An integrated research for the development of a scheme to control emerging vector-borne viral diseases in Asia]

[#9 Project Title: Evaluation of the pandemic potential of H5N1 highly pathogenic avian influenza virus circulating in Indonesia]

• Dr. Bun proposed to evaluate each project progress by considering its timeline committed in the project plan. Dr. Villar also recommended to evaluate project deliverables defined in the project plan of each year.

• The Secretariat requested all SAC members to submit their comments on the final/progress reports through e-mail by May 1st.

7. e-ASIA Alumni Network

• As the first step for developing e-ASIA Alumni Networks, the Secretariat introduced the idea of re-design of the e-ASIA website to construct a virtual network on the website, by posting information such as name lists connected to the projects, contact information, expertise and research information of researchers, as was suggested in the last SAC meeting. Dr. Morens recommended to add a hyperlink to each researchers' publication, but a copyright concern was brought up in the discussion. Also, another concern was shared among SAC members that a tremendous effort and manpower is needed to maintain and update the alumni network database. Need further discussion.

8. Next 5th SAC Meeting

•Feb-Mar 2018 time frame to have the next 5th SAC meeting was proposed by the Secretariat. The detailed plan and venue will be discussed with the Member organizations.

Learning Session and Others

9. S&T Policy of Participating Countries

- · Dr. Chanwit gave an introductory presentation on NSTDA, Thailand.
- · Dr. Morens gave an introductory presentation on NIH, USA.
- Dr. Bridge introduced AMED and its Singapore office.

10. Closing Remarks

• Dr. Bun made a closing remark of the 4th SAC meeting, representing MOH as the meeting host organization. The SAC meeting participants showed sincere appreciation to him for the hospitality of MOH, Dr. Bun and his staff.

Appendix

Meeting Participants:

Participants:

(1) SAC Members

- <u>Prof. Teruo Kishi</u>, Program Director, Japan Science and Technology Agency, Japan
 *1st SAC Chair (2014.2-present)
- <u>Dr. Sreng Bun</u>, Manager of Cambodian Applied Epidemiology Training (CAET) & Deputy-Director, Department of Communicable Disease Control / Ministry of Health, Cambodia
- <u>Dr. Ira Nurhayati Djarot</u>, Director for System of Research and Development, Ministry of Research, Technology and Higher Education, Indonesia
- <u>Dr. Chanwit Tribuddharat</u>, Vice President, National Science and Technology Development Agency, Thailand
- <u>David M. Morens, M.D.</u>, Senior Advisor to the Director, National Institute of Allergy and Infectious Diseases, U.S.

(2) Representative of the SAC member

 <u>Dr. Edwin C. Villar</u>, Acting Deputy Executive Director for Research and Development of Department of Science and Technology -Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (DOST- PCAARRD), the Philippines
 *as deputy for DOST's SAC member:

(3) e-ASIA JRP Secretariat Office:

- <u>Mr. Masaki Sato</u>, Secretary-General, e-ASIA JRP Secretariat / Director, Japan Science and Technology Agency Singapore Office, Japan
- <u>Mr. Yoshihide Kobayashi</u>, e-ASIA Special Program Coordinator, e-ASIA JRP Secretariat / Japan Science and Technology Agency, Japan
- Ms. Jirawadee Matoon, e-ASIA JRP Secretariat Office, International Relation Officer, National Science and Technology Development Agency, Thailand

(4) Representatives from "Observer" (Prospective "Guest Partner")

■ <u>Dr. Geethika Yapa</u>, Head of the Research Division, National Science Foundation, Sri Lanka

(5) Others (Staff from Member Organizations):

- Mr. Kuoch Sokdararith, Officer of CDC/MOH, Department of Communicable Disease Control / Ministry of Health, Cambodia
- Dr. Berkah Fajar Tamtomo, Deputy Director for Strategic Partnership, Ministry of Research, Technology and Higher Education, Indonesia
- > <u>Dr. Shiho Bridge</u>, Medical R&D Specialist, Japan Agency for Medical Research and

Development Singapore Office, Japan

- <u>Mr. Yukihiro Hisanaga</u>, Manager, Department of International Affairs, Japan Science and Technology Agency, Japan
- <u>Ms. Shoko Hirakawa</u>, Chief, Department of International Affairs, Japan Science and Technology Agency, Japan
- <u>Dr. Takashi Kawabe</u>, Researcher, Department of International Affairs, Japan Science and Technology Agency, Japan
- <u>Ms. Eriko Kishida</u>, Chief, Ministry of Foreign Affairs / Japan Science and Technology Agency, Japan

*No participants from Australia, Lao PDR, Malaysia, Myanmar, New Zealand, Russia and Vietnam