

Date: March 22, 2018

Venue: SUPER HOTEL Candle, Hanoi, Vietnam

Participants: Listed in the Appendix

The 5th 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 five countries, Representative of SAC members from two countries and Representative of Board member from one country, out of thirteen countries represented by Member organizations of the e-ASIA Joint Research Program (hereunder referred to as the “Program”) namely: Japan, Lao P.D.R., New Zealand, the Philippines, Russia, Thailand, the United States, and Vietnam. Also in attendance were the Program Secretary General, Secretariat, administrative staffs of Member Organizations from Japan, Lao P.D.R., Russia, Thailand, and Vietnam. A list of the participants is attached to the Minutes as Appendix.

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

- Greetings and self-introduction were made by the SAC members (including their representatives), the Program Secretariat and the other participants from each Member organization.

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

- From the host country for the 5th SAC meeting, Assoc. Prof. Tran Ngoc Ca (Member of National Council for Science and Technology, Vietnam) made an introductory speech on “STI in Vietnam: a policy landscape in the context of international integration”. The overall STI (Science, Technology and Innovation) structure and policies in Vietnam including background statistics data (S&T state budget vs GDP, Foreign Direct Investment, Patent classification, etc.) were presented. Several positive features such as strong state leadership commitments and new S&T ecosystem introduction are being implemented. However, there remain issues at stake such as poor S&T infrastructure and weak linkage with firms. For the future, Prof. Ca described the state needs to pursue mixing structure of incremental improvement and breakthrough innovation with a help of international cooperation. A few questions and comments from SAC members on institute-university relationships and “niche” innovation were

made and discussed. Also, Dr. Chanwit (the SAC Vice Chair, Thailand) appreciated Prof. Ca's comprehensive presentation and emphasized the importance of learning with each other among the Program participants.

■ Updates and Review Session

1. **Update on the Past Activities after the 4th SAC Meeting** (presented by the Program Secretariat)

- National Science Foundation (NSF, Sri Lanka) newly joined to the Program with a "Guest Partner" membership.
- Program activities including a workshop held after the 4th SAC Meeting were explained.
- Updates on ongoing research projects and the 7th Call for Proposals were summarized.

2. **Review of the 4th SAC Meeting** (presented by the Program Secretariat)

- The minutes of the 4th SAC Meeting was briefly reviewed. Specifically, the SAC proposal on the number of SAC member per country was reiterated as an important topic discussed last year.

3. **Report on the 6th Annual Board Meeting** (presented by Prof. Kishi and the Program Secretariat)

• A summary of below four key topics discussed in the 6th Annual Board Meeting was briefly introduced by Prof. Kishi.

- 1) Discussion on SAC Proposal – "1 SAC member per 1 country"
- 2) Call topics for the 7th Call for Proposals (Jan.-Apr., 2018)
- 3) Promotion of Early Career Researchers
- 4) Review on Past 5-year Activities and Achievements of e-ASIA JRP

• More details were reported by the Program Secretariat. The Board conclusion on the topic 1) was "one SAC member per country" supporting the SAC proposal, and relevant modification of the Terms of Reference of the Scientific Advisory Council was already made by the Program Secretariat and approved by the Board. For the topic 2), the Board discussed six candidate topics in the Board Meeting, but finally four topics under three fields of cooperation ("Bioenergy" under the field of Alternative Energy, "Torrential Rainfall, Associated Flood and Land Slide" under the field of Disaster Risk Reduction and Management, "Cancer" and "Infectious Diseases" under the field of Health Research) were selected afterward for the current 7th call for proposals.

■ Discussion Session

4. **Priority Topics for the Future Cooperation**

- Each SAC member was requested to make a brief presentation on preferred priority

topics for future international cooperation (joint research topics for future calls for proposals), and to elaborate the reason why the topics are suitable for the Program.

• Japan (Mr. Osamu Kobayashi for Prof. Kishi) brought up below six topics and presented key summaries of each topic including consistency with SDGs.

- 1) Functional Bio-Nanotechnology for Innovative Materials System (Materials(Nanotechnology))
- 2) Materials Informatics for Materials Integration (Materials(Nanotechnology))
- 3) Utilization of Genetic Resources of Native Animal Species in Asia for Healthy and Functional Food (Agriculture(Food))
- 4) Resilience against Natural Disasters for Sustainable City (Disaster Risk Reduction and Management)
- 5) Intelligent Infrastructure for Water (Advanced Interdisciplinary Research towards Innovation)
- 6) Diagnosis, Prevention and Therapy of Cancers caused by Infectious Diseases (Health Research)

• Dr. Chao (US) pointed out that “Water Infrastructure” research is also important for another SDG Goal (#3: Good Health and Well-Being) but the SDGs goals of #6, #9, #11, #17 shown in the chart.

• Dr. Eborá (Philippines) showed interest in the “Native Animal Genetic Resource” topic recently discussed in the e-ASIA workshop in Thailand.

• Dr. Thuy (Vietnam) also showed agreement with “Native Animal Genetic Resource” and “Bio-Nanomaterial” topics. She asked whether the “Genetic Resource” topic also covers “Plant” or not. The Program Secretariat answered it is not included at this moment, although the importance of plant is well understood.

• Lao P.D.R. (Dr. Silap) reiterated the importance of SDGs and ASEAN targets in Biofuel, brought up below three topics in the field of “Alternative Energy”, and appreciated future opportunity to promote regional innovation experience and to share relevant experiences of regional knowledge and experience that can promote human development and cross-border movement of human resources.

- 1) Biomass Power Generation and Heat Utilization
- 2) Biofuel for Transportation by using Non-Food Materials. They can avoid conflict with foods.
- 3) Building Low Carbon Society

• Mr. O.Kobayashi gave relevant information to the meeting participants that there is an established open innovation research center for biomass in TISTR (Thailand Institute of Scientific and Technological Research), which could perhaps be linked with the e-ASIA Program.

• Mr. Sato (The Secretary General) asked about “Non-Food Materials for Biofuel”. Dr. Silap replied there are various cellulose-based biomass such as herbaceous and agricultural waste as raw materials such as Rice Straw, Millet, Rice Husk, Saccharum Spontaneum, etc.

• New Zealand (Prof. Mercer) preferred “Infectious Diseases and Cancer” in the “Health Research” field with new fund support and anticipated success rate of approx.20%.

• Dr. Chao (US) supported this topic to be continued as one of future e-ASIA call topics.

• The Philippines (Dr. Eborra) brought up wide range of topics below and welcomed any suggestion from the participants since the scope of these topics is still broad.

- 1) Nanotechnology from Indigenous Materials (Cellulose Nanopaper from Bamboo) (Materials(Nanotechnology))
- 2) Small Wind Turbine Design, Development and Testing (Alternative Energy)
- 3) Functional Materials for Alternative Energy Sources (Alternative Energy)
- 4) Energy Conversion, Harvesting and Storage (Alternative Energy)
- 5) Nanotechnology for Agriculture (Nanocapsules, Nanoparticles and Nanoemulsions as smart delivery systems of active ingredients for disease and pest control in plants, Nanomaterials for water or liquid agrochemical retention in the soil for slow release to the plants) (Agriculture(Food))
- 6) Animal Genetic Resources Conservation, Improvement and Utilization (DNA marker-aided selection and breeding and assisted reproduction biotechnologies for native pig conservation and utilization, Genetic characterization, improvement and utilization of Philippine native chickens) (Agriculture(Food))
- 7) Aquaculture, Biodiversity, Genomics (Propagation of Philippine native catfish (*Clarias macrocephalus*) to protect its wild population) (Agriculture(Food))
- 8) Smart Grid (Intelligent smart grid technologies, Power grid data analytics, Smart grid communications and information technologies, Distributed energy resources and network integration, Intelligent Micro-grid applications) (Advanced Interdisciplinary Research towards Innovation)
- 9) Mechatronics (Mechatronics applications to Internet of Things, Robotics and intelligent autonomous systems, Electromechanical Human-Machine Interaction, Embedded Sensors Networks for Mechatronic Applications) (Advanced Interdisciplinary Research towards Innovation)
- 10) Marine Science and Marine Geology (Environment(Climate Change, Marine Science))
- 11) Climate Change - Functional materials and nanocomposites for adsorptive gas separation, storage and removal (e.g. carbon dioxide capture, storage of methane and hydrogen) (Environment(Climate Change, Marine Science))

• The Program Secretariat pointed out that the “Biomass Material” topic is close to one of

the Japan's proposals, and can be a good candidate topic for collaboration. Also, the Program Secretariat appreciated strong support from the Philippines team to the e-ASIA workshop on "Animal Genetic Resource" topics early this month.

- Mr. Sorokotyaga (Russia) expressed his support to the "Marine Geology" topic including underwater volcano research.

- Dr. Chanwit (Thailand) explained that Thailand has some collaborative research projects in the "Smart Grid" topic including energy storage technology. One example is a collaboration with Case Western Reserve University (US).

- Dr. Thuy (Vietnam) told that Vietnam also needs "Smart Grid" technology in some provinces. The Program Secretariat introduced previous e-ASIA experience of relevant call for proposals that we had only three proposal applications in the "Energy" call. We may need an action (such as planning a workshop) to invite more researchers in case we have another "Smart Grid" call in the future.

- Dr. Thuy (Vietnam) also expressed supportive comments on "livestock", "biodiversity and biotechnology" topics as well as "Marine Science".

- Russia (Mr. Sorokotyaga) explained that they prefer wider field of topics and ready to support more projects. The example of proposed topic keywords are as follows; Medicare, Cancer and Infectious Diseases, Environment and Climate Change, Global Warming and Heat Wave, Marine Geology and so forth. For the "Climate Change" topic, he plans to set up a side meeting event (workshop) of the next Annual Board Meeting in Vladivostok around August 20th.

- Mr. Sato asked if heavy rain in Russia could be a typical example of "Climate Change". Mr. Sorokotyaga answered that we need global approach to tackle on this issue, not limited to problems in Russia.

- Thailand (Dr. Chanwit) described below priority topics representing four funding agencies (NSTDA, TRF, TCELS and ARDA).

- 1) Biomass Energy (Biofuel, Biodiesel, Bioethanol, Co-firing) (Alternative Energy)
- 2) Agricultural Adaptation to Climate Change for Sustainable Production and Consumption (ex. Forecast System, Precision Farming) (Agriculture(Food))
- 3) Biomedical Research for Precision Medicine (Health Research)
- 4) Best Practices on Waste Management and Waste to Energy (Advanced Interdisciplinary Research towards Innovation)
- 5) Regenerative Medicine (Health Research)

- Dr. Eborra (Philippines) confirmed that the Philippines can support Precision medicine and Regenerative medicine, which are covered by Road map of the Philippines and the Philippines and Thailand have many common topics to be challenged, particularly in the

“Health Research” field.

- Prof. Kishi(Japan) and Dr. Chanwit (Thailand) both shared common understanding that one of the most important viewpoints in “Waste Management” is “Urban Mining”, which means recycling of (rare) metals from waste products.

- Dr. Silap (Lao PDR) showed intension of support to “Biomass Energy”. Mr. Sorokotyaga (Russia) commented that we need at first to confirm the response from researchers in the current “Bioenergy” call for proposals.

- Mr. Sorokotyaga (Russia) expressed interest in “Precision Medicine”. For “Regenerative Medicine”, the Program Secretariat told that more funding agencies are showing intention of support this year compared with insufficient support obtained from the SAC meeting participants last year.

- US (Dr. Chao) elaborated on below “Health Research” topics in detail.

- 1) Standardized and specific health statistic information on morbidity and mortality of important diseases by demographic variables such as age, sex, urban/rural, etc.
- 2) “One Health” studies of the relationships between human & animal health and the environment, e.g., influenza, arboviruses, antibiotic use in agriculture
- 3) Infectious diseases
- 4) Infection-associated cancers, HIV/AIDS-related cancers
- 5) Study of oral cancer and risk factors
- 6) Screening, early detection, and treatment of nasopharyngeal cancer
- 7) Evaluation of natural products and traditional medicines

- Prof. Mercer (New Zealand) showed positive expectation to “One Health” studies for synergy effect in “Health Research” field.

- Dr. Eborá also showed interest in Herbal medicine, and will discuss more with domestic divisions in charge.

- Dr. Thuy (Vietnam) particularly agreed with three proposed topics; “One Health”, Antibiotic and Natural Medicine.

- Prof. Mercer and the Program Secretariat questioned to the participants, whether we should narrow down each topic from today’s proposals or keep broad. The Program Secretariat stated that we usually prefer broader scope of topics in order to invite more proposals. Dr. Chao (US) commented that it is better not to narrow down the “Precision Medicine” topic in particular, but we may see difficulty in our evaluation process if the call topic scope is too broad. Prof. Mercer (New Zealand) asked what number of proposal applications is considered as appropriate. Mr. Sato replied that we actually have no know-how to handle too many applications. In conclusion, the SAC members recommended the Board to specify broadness of each topic scope through discussion among Member organizations.

• Vietnam (Dr. Thuy) described below four topics in addition to their strong interest in biomass and bioenergy technology.

- 1) Advanced technology for agriculture, farming and food. Vietnam's agricultural, fisheries, forestry and food industries to embrace innovations and adopt new technologies to respond to market changes, to open up new markets and maintain a competitive ability in the face of economic and climatic challenges. (Agriculture(Food))
- 2) Improvement of understanding and evidence of pest and disease pathways to help direct biosecurity resources to their best uses, minimizing biosecurity threats and improving market access for farmers. (Agriculture(Food))
- 3) Soil, water and managing natural resources to manage soil health, improve water use efficiency and certainty of supply, sustainably develop new production areas and improve resilience to climate events and impacts. (Agriculture(Food))
- 4) Adoption of advanced technology, R&D focusing on flexible delivery of extension services that meet farmer's needs and recognizing the growing role of private service delivery, including the abroad private companies. (Agriculture(Food))

• Ms. Lam (Vietnam) also introduced that some research projects relevant to Industry 4.0 are ongoing in Vietnam. Dr. Ehora (Philippines) responded that the Philippines could collaborate in some of the projects if specified more details.

• Dr. Thuy (Vietnam) elaborated on "flexible delivery of extension services", that means technology transfer of ICT for agriculture, as an example. Mr. Sato proposed that IT (Information Technology) can be a common e-ASIA call topic since we are seeing the keyword "IT" in almost all research fields. Mr. O.Kobayashi (Japan) expressed his view that IT itself is not our research target at the current moment but just a method to achieve our goals in various fields, and it is not appropriate to consider IT as a call topic in the Program. Prof. Kishi (Japan) also emphasized the importance of "IoT (Internet of Things)" as a specific application example of IT.

• On the "Precision Medicine" and "Regenerative Medicine" topics which Thailand proposed, Mr. Sato asked if they can be appropriate research topics to be covered in the e-ASIA region. Dr. Chao (US) expressed her positive view that we can at least target precise diagnostics by utilizing resources in the e-ASIA countries and by improving diagnostic data quantity and quality. Mr. Sato introduced an example of diagnostic database currently being established by AMED (Japan Agency for Medical Research and Development), and Dr. Chao (US) agreed with the importance of complete diagnostic database supported by as many countries as possible including the e-ASIA region. Prof. Mercer (New Zealand) also reiterated the value of "Precision Medicine" and endorsed that the Program can contribute to it.

5. Discussion on the Progress Report

- One Progress Report on the below topic was shared with all SAC members.

(Project Title) Collaborative fever etiology research in South East Asia

(Joint Research Period) Nov.1st 2016 – Oct.31st 2018

(Principal Investigators) Prof. John A. Crump (New Zealand), Prof. Wah Win Htike (Myanmar), and Prof. Paul N. Newton (Lao PDR)

- Prof. Mercer (New Zealand) briefly presented a summary of its progress, and stated his positive evaluation comments since it is going very well with on-target progress. The project is also contributing to building research capacity as well as good partnership among its team member countries.
- Dr. Silap (Lao PDR) supported Prof. Mercer's evaluation and appreciated the project progress.

6. Five Years Program Evaluation of the e-ASIA JRP

- At the last Annual Board Meeting, the Board agreed to request the SAC to conduct evaluation of the five years activities of the e-ASIA JRP since its inauguration. The Program Secretariat summarized all the past activities and described a draft presentation package.
- Based on the information described in the presentation, the SAC was requested to discuss and finalize evaluation results (comments) in the meeting.
- The Program Secretariat proposed below five questions as the items of this evaluation.
 - (1) Did the Program contribute for promotion of the science and technology community in East Asia?
 - (2) Did the Program contribute to
 - (2-a) Human resource development in the region;
 - (2-b) Generation of “novel knowledge and competitive technologies” and
 - (2-c) Generation of “synergistic, supplemental and leveraged effects”?
 - (3) Did the Program seek genuine partnerships for mutual contribution and equitable allotment of outcomes?
 - (4) Were decisions regarding the Program made rationally and objectively, supported by fact and guided by scientific experience?
 - (5) Was the Program management effective?
- For each item, the Program Secretariat presented summary of past Program activities, history, data, and drafted evaluation comments for the SAC member's review. The meeting participants discussed the draft package contents and modified the evaluation results as needed.
- Please see the discussion minutes below for each evaluation item. For the presentation detail, please see the attached package.

(1) Did the Program contribute for promotion of the science and technology community in East Asia?

• Mr. O.Kobayashi asked if we need to take any action to invite countries which are not yet participating in the Program (ex. Singapore, China). The Program Secretariat answered as follows: Singapore shows interest only in advanced (and limited) research fields, such as water treatment, and discussion is ongoing with a government agency. India shows interest in biomedical field, and therefore either precision medicine or regenerative medicine topic may help for our negotiation to invite them. From Australia, we have only NHMRC (National Health and Medical Research Council) for now. Since CSIRO (Commonwealth Scientific and Industrial Research Organization) in Australia established an office recently in Singapore, the Program Secretariat will keep talking with them.

• Dr. Chanwit (Thailand) showed his concern if the Program is able to support Member organizations under limited budget condition in the future in order to invite their active contribution to the Program. The Program Secretariat stated that, as an example, the Program introduced “in-kind” participation scheme in order for such countries to be able to actively join our calls for proposals, although our fundamental program rule is “co-fund”. Another example of contribution to the Program for such countries is “in-kind” support to an e-ASIA workshop.

• Dr. Chanwit (Thailand) also asked how absent members from the SAC meeting can input their opinions and comments to the Program. The Program Secretariat answered that we always accept inputs through e-mails to guarantee equal opportunity for all Member organizations.

• Prof. Mercer (New Zealand) asked why the “Environment (Climate Change, Marine Science)” field had no call activity before and how we should address to the issue. Dr. Chao (US) also pointed out that we need to clarify whether we had no supporting agency to an “Environment” call or no proposal applications to the call. The Program Secretariat explained that the “Environment” field was newly introduced from the 4th Annual Board Meeting (2015), and at the beginning of the latest 7th call discussion three agencies showed intention to participate. However, at later confirmation, some of them declined participation and we could not launch the call. For better understanding of the Board, it was recommended to the Program Secretariat to clarify this background when presenting the package to the Board.

• Dr. Silap (Lao PDR) proposed to add comments on research progress or innovation viewpoint (ex. STI instead of S&T) to the evaluation result in addition to promotion of S&T community. The Program Secretariat answered that was addressed in the part (2) of the presentation.

• For the third bullet in the evaluation results of item (1), Dr. Eborá (Philippines) proposed

to include “contributing to active participation of S&T community and to expansion of area of cooperation” since the Program actually did not help “expand” S&T community in reality.

• In conclusion, modified and agreed evaluation result for (1) is as follows:

- The numbers of participating organizations and countries that have participating organizations have steadily increased every year. Further expansion of collaboration beyond the East Asia Summit (EAS) participating countries is an additional achievement. However, there are still some EAS participating countries that have no participating organization yet. As the SAC, we hope for the Program to expand collaboration to those EAS participating countries.
- The Program expanded the fields of cooperation from the original five fields to seven and Member Organizations have steadily implemented program activities in the almost all the fields of cooperation. However, there remains a field of cooperation in which no joint activity has been done yet. We hope the Program will implement activities in all the fields of cooperation.
- The Program has steadily implemented joint calls for proposals. The numbers of projects and related PIs have increased every year. This is contributing to active participation of the STI community and the expansion of areas of collaboration in the region.

(2) Did the Program contribute to

(2-a) Human resource development in the region;

(2-b) generation of “novel knowledge and competitive technologies” and

(2-c) generation of “synergistic, supplemental and leveraged effects”?

• Dr. Silap proposed to unify the wording in “young” and “early-career” researchers. The Program Secretariat agreed to use “early-career” in the presentation.

• Dr. Silap (Lao PDR) also asked if we can present the trend data of quality indicators of research publications/activities/international and national recognition per call for proposals. The Program Secretariat answered that we showed only total numbers due to the limitation of overall data amount.

• Dr. Chao (US) proposed to make a written consolidated document of this Program evaluation to be submitted to the Board in addition to the PowerPoint presentation. The Program Secretariat expressed a strong concern and hesitation to make a long document by limited current resource. The meeting participants agreed to continue using the PowerPoint package.

• For the evaluation item (2-b), Dr. Silap (Lao PDR) proposed to add “new know-how” to “novel knowledge”. Mr. Sato gave an example of project “Corrosion Mapping” demonstrating the value of know-how.

• In conclusion, modified and agreed evaluation result for (2) is as follows:

(2-a)

- The Program is making a positive contribution to researchers' capacity development and network expansion through the activities such as training, research exchange with the partner countries, implementation of workshops and research presentation at various events. Besides that, there is additional contribution that participating research institutes of a project jointly signed a MOU to create more effective collaborative environment for human resource development between the institutes.
- Some Member Organizations (MEXT / JST and AMED) have implemented a scholarship program specially reserved for e-ASIA JRP projects. This is a good example of Member Organizations' own effort together with the e-ASIA JRP itself to nurture early career researchers.

(2-b)

- The Program is contributing to the generation of new knowledge/new know-how through collaborative research. In addition, some outputs of collaborative research, such as improvement of crops and medical diagnostics, are contributing or expected to contribute to the progress of our society.

(2-c)

- The e-ASIA projects are demonstrating synergistic effects by conducting collaborative research while making full use of the strengths of each country in various research processes complementarily such as on-site data collection, analysis and growth of research target.

(3) Did the Program seek genuine partnerships for mutual contribution and equitable allotment of outcomes?

• For the chart of “Number of Projects and Funding”, Prof. Mercer (New Zealand) questioned the total funding amount of New Zealand. The Program Secretariat will double-check with HRC.

• For the same chart above, Mr. Sorokotyaga (Russia) stated that Russia is now supporting three projects while the chart shows only one project supported. The Program Secretariat clarified that the two projects with Russia in the “Material” field in the 6th call were not yet officially approved.

• For the same chart above, Dr. Eborra (Philippines) expressed his concern with showing “zero funding” since all projects should have spent some amount of money to execute their research activities regardless of the e-ASIA support modality. Mr. Sato answered that the Program Secretariat will confirm the support amount with each agency. Also, Mr.

O.Kobayashi (Japan) proposed to specify the projects with “in-kind” support in the chart.

• For the chart of “Workshops and Related Meetings”, Dr. Chanwit (Thailand) proposed to add a comment for TCELS/TRF that these agencies “supporting no project since they just

participated in the program”.

- In conclusion, modified and agreed evaluation result for (3) is as follows:

- The Program is realizing genuine partnerships for mutual contribution for both researchers and Member Organizations through implementing collaborative projects as well as organizing research workshops and related meetings.
- Since workshops are an opportunity for creating new researcher networks and discovering new research themes, we encourage further contributions by each Member Organization.
- Due to introduction of multiple funding modalities, it became easier for more Member Organizations to participate in joint calls for proposals under the Program. The Program is providing an environment in which researchers from all the countries that have participating organizations in the Program can contribute to projects and outcomes.

(4) Were decisions regarding the Program made rationally and objectively, supported by fact and guided by scientific experience?

- For the chart of “Decision Making in the e-ASIA JRP”, Dr. Chanwit (Thailand) requested to change the color of letters from yellow to another one for better readability on screen.

- For the second bullet in the evaluation results of item (4), Dr. Chao (US) proposed to modify “scientific experience” to “scientific and programmatic priorities of each Member organization”.

- In conclusion, modified and agreed evaluation result for (4) is as follows:

- Decisions regarding the Program were made rationally and objectively by the Board, with advice from the SAC as necessary, which is the neutral advisory council consisting of science and technology experts.
- In the selection of call topics, the Program is trying to make decisions based on facts and scientific and programmatic priorities of each Member Organization suggested by the SAC and/or learned through research workshops.

(5) Was the Program management effective?

- The Program Secretariat brought up the issue of award notice delay in the most past calls for proposals. Mr. Sorokotyaga (Russia) agreed with this concern since the delay could restrict another call application for researchers. This should also be a concern of funding agencies considering possible fiscal year change during the delay period. He proposed to provide a strong message on this issue to the Board.

- Mr. O.Kobayashi (Japan) asked the reason of each delay to the Program Secretariat. The Program Secretariat explained about the background of two typical delays as follows:

- 11 months delay in the 5th call: For one concerned project, ARDA (Thailand) changed

funding modality from “new” to “not to support”. Finally, “in-kind” support was agreed.

- 8+ months delay in the 6th call: For two concerned projects, MOST (Vietnam) required time to finalize each support detail. One project was agreed with “new” budget and will be officially approved soon. The other project suddenly proposed PI (Principal Investigator) change and the approval process is still underway.
- Dr. Chao (US) expressed her view that the concerned delay in award notice should be an exceptional case due to unusual circumstances in some limited calls, not in most calls. She recommended to add a necessary improvement action to the evaluation comment. (ex. “improved responsiveness from member organizations would assist the Program Secretariat”)
- Prof. Mercer (New Zealand) also recommended to add the time interval data between the call topic decision and the call open date, in order to show the Program Secretariat performance. Mr. Sato and the Program Secretariat replied that we need strong cooperation from member organizations to shorten the above lead time, since they sometimes experienced slow response from relevant members.
- Prof. Kishi (Japan) recommended to consider the introduction of our official peer review process to be established.
- In conclusion, modified and agreed evaluation result for (5) is as follows:
 - The Program has steadily been improving program management every year and is trying to realize effective program management.
 - During calls for proposals, award notices were delayed for several months in most calls for proposals. This may have caused the applicants delay in activities related to the proposals. For a small number of proposals extended delays occurred due to unusual circumstances. We hope both the Program Secretariat and Member Organizations collaboratively improve the processes in the future call implementation.
 - Improved responsiveness from Member Organizations would assist the Program Secretariat.

7. Next 6th SAC Meeting

- The participating SAC members all recommended to have the next SAC meeting within an ASEAN area, considering travel time for most participants.

8. Closing Remarks

- Ms. Lam (Vietnam) made a closing remark of the 5th SAC meeting, representing MOST as the meeting host organization. She appreciated productive discussion in this successful meeting, and believed we can make a good output to the Board meeting. The SAC meeting participants also showed sincere appreciation for the hospitality of MOST, Ms. Lam and her staffs.

Appendix

Meeting Participants:

1. SAC Members

- **Chair:** Prof. Teruo Kishi, Program Director, Japan Science and Technology Agency, Japan
*the 2nd Chair of the SAC (April 2017 -present)
- **Vice-Chair:** Dr. Chanwit Tribuddharat, Specialist, National Science and Technology Development Agency, Thailand
*the 2nd Vice-Chair of the SAC (April 2017 – present)
- Dr. Reynaldo V. Eborá, Executive Director, Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development, Department of Science and Technology(DOST-PCAARRD), the Philippines
- Dr. Nguyen Thi Thanh Thuy, Director General, Ministry of Agriculture and Rural Development, Vietnam
- Prof. Andy Mercer, HRC Board member, Chair of the HRC's Statutory Biomedical Research Committee, Health Research Council, New Zealand

2. Representative of the SAC member

- Dr. Silap Bouppha, Advisor to the Ministers, Ministry of Science and Technology, Lao P.D.R.
- Dr. Ann Chao, Senior Advisor for Cancer and NCD, National Cancer Institute, the United States
*as deputy for the SAC member of the United States

3. Representative of the Board member

- Mr. Yaroslav Sorokotyaga, Division Director, International Relations Department, Russian Foundation for Basic Research, Russia
*SAC member from Russia has not been assigned yet.

4. Keynote Speaker and Host Executives from Vietnam

- Assoc. Prof. Tran Ngoc Ca, Member of National Council for Science and Technology, Vietnam
- Ms. Le Thi Viet Lam, Deputy Director General, Department of International Cooperation, Ministry of Science and Technology, Vietnam

5. e-ASIA JRP Secretariat Office:

- Mr. Masaki Sato, Secretary-General, e-ASIA JRP Secretariat / Director of Singapore Office, Japan Science and Technology Agency(JST), Japan
- Mr. Yoshihide Kobayashi, e-ASIA Special Program Coordinator, e-ASIA JRP Secretariat / Japan Science and Technology Agency(JST), Japan
- Ms. Jirawadee Matoon, Assistant Staff, e-ASIA JRP Secretariat Office / International Relation

Officer, National Science and Technology Development Agency, Thailand

6. Others (Staff from Member Organizations):

- Mr. Mitsuyuki Ueda, Director, International Science and Technology Affairs Division, Science and Technology Policy Bureau, Ministry of Education, Culture, Sports, Science and Technology (MEXT), Japan
- Mr. Osamu Kobayashi, Director, Department of International Affairs, Japan Science and Technology Agency(JST), Japan
- Ms. Shoko Hirakawa, Chief, Department of International Affairs, Japan Science and Technology Agency(JST), Japan
- Dr. Takashi Kawabe, Senior Program Coordinator, Department of International Affairs, Japan Science and Technology Agency(JST), Japan
- Ms. Eriko Kishida, Chief, Japan Science and Technology Agency(JST) / Ministry of Foreign Affairs, Japan
- Mr. Alamith Douangmala, Secretary to Vice Minister, Ministry of Science and Technology, Lao P.D.R.
- Mr. Denis Rudik, International Relations Department, Russian Foundation for Basic Research, Russia
- Ms. Bui Thi Tu Lan, Head of General Affairs and Multi-Lateral Division, Department of International Cooperation, Ministry of Science and Technology, Vietnam

**No participants from Australia, Cambodia, Indonesia, Malaysia and Myanmar*