

## The 9<sup>th</sup> Annual Board Meeting of the e-ASIA Joint Research Program

Date: September 9, 2020 10:00-12:00 (Thai Time: UTC+7)

Virtual Meeting: Zoom Platform

Participants: Listed in the Appendix

### Minutes of the Meeting

1) The 9<sup>th</sup> Annual Board Meeting (ABM) of the e-ASIA Joint Research Program (the Program) was held on the 9<sup>th</sup> of September 2020 as a virtual Zoom meeting. The meeting was attended by the Board Members and the representatives, including other participants from the following 19 Member Organizations (MOs) of the Program from 12 countries:

1. National Health and Medical Research Council (NHMRC) of Australia
2. Ministry of Industry, Science, Technology and Innovation (MISTI) of Cambodia
3. Ministry of Health (MOH) of Cambodia
4. Ministry of Research and Technology / National Research and Innovation Agency (RISTEK/BRIN) of Indonesia
5. Ministry of Education, Culture, Sports, Science and Technology (MEXT)/ Japan Science and Technology Agency (JST) of Japan
6. Japan Agency for Medical Research and Development (AMED)
7. Ministry of Science, Technology and Innovation (MOSTI) of Malaysia
8. Ministry of Education (MOE) of Myanmar
9. Health Research Council (HRC) of New Zealand

10. Department of Science and Technology (DOST) of the Philippines
11. Agency for Science, Technology and Research (A\*STAR) of Singapore
12. Agricultural Research Development Agency (ARDA) of Thailand
13. National Research Council of Thailand (NRCT) of Thailand
14. National Science and Technology Development Agency (NSTDA) of Thailand
15. Thailand Center of Excellence for Life Sciences (TCELS) of Thailand
16. Program Management Unit (PMU)-B of Thailand
17. National Cancer Institute (NCI) of the United States of America
18. National Institute of Allergy and Infectious Diseases (NIAID) of the United States of America
19. Ministry of Science and Technology (VMOST) of Viet Nam

The full list of participants is attached to these minutes as an appendix. The Board Members from Ministry of Science and Technology (MOST) and Ministry of Health (MOH) of Lao PDR, Russian Foundation for Basic Research (RFBR) of Russia, and Thailand Science, Research and Innovation (TSRI) of Thailand did not attend.

### **Opening Remarks by e-ASIA Secretariat and Introductions**

- 2) Ms. Emi Kaneko, Secretary-General of the e-ASIA JRP, provided opening remarks to start the meeting that was intended to be in Hawaii. NIAID, with the East-West Center (EWC), which is willing to host the meeting next year and is contributing to this year's meeting by documenting the meeting minutes/summary. Because this is a virtual meeting and there is no local host to chair the meeting, the Program Secretariat (Ms. Kaneko and Mr. Yoshihide Kobayashi, e-ASIA Special Program Coordinator) served as the meeting's moderators. Mr. Kobayashi reviewed the schedule of the meeting. The purpose of the meeting is to discuss the

agenda items, and any voting will be done via email by the end of September similar to *ad hoc* meetings. With the virtual meeting format, this meeting included the largest number of member organizations. Each Board Members briefly introduced themselves, and they expressed their appreciation and thanks to the Program Secretariat for organizing the meetings. Mr. Gray Handley of NIAID thanked everyone for joining the virtual meeting, and said he hopes to meet next year in person in Honolulu, Hawaii. Ms. Kaneko reiterated that today's meeting is only for discussion and that voting will be done by email.

### **Introductory presentations from MOSTI, Malaysia and PMU-B, Thailand**

- 3) The Secretariat welcomed two new member organizations (MOs), MOSTI of Malaysia and PMU-B of Thailand. Mr. Teoh Phi Li provided an overview of MOSTI Malaysia. It was established in 1973 as the Ministry of Technology, Research and Local Government. Since its establishment, the ministry has gone through several transformations and reorganizations. MOSTI's role is focused on developing socio-economic drivers; science, technology, and innovation (STI), and environment (E). There are many agencies and research institutions under MOSTI, and they vary depending on their objectives and set-up. MOSTI's work is guided by the "10 to 10" STI framework that includes 10 S&T drivers and 10 Malaysian socioeconomic drivers, which overlap with the e-ASIA focus areas. The e-ASIA JRP's fields of cooperation bodes well with MOSTI's focus on STIE. For the e-ASIA JRP, MOSTI will work as a facilitator and bridge with other agencies/ministries in Malaysia. They look forward to working with e-ASIA JRP and MOs in the various areas.
- 4) Dr. Kanyawim Kirtikara of PMU-B, a newly established organization, also provided an introductory presentation. The higher education, science, research and innovation system was recently reformed in Thailand and Thailand MOST ceased to exist after May 2019. Instead

MHESI (Ministry of Higher Education, Science, Research and Innovation) was established from the following four existing agencies: Science and Technology Ministry, Office of the Higher Education Commission, National Research Council of Thailand, and Thailand Research Fund. The new ministry supports higher education and research institutes. A major reform in budgeting established the Science Research & Innovation Fund, which enables the budget to be used beyond the annual fiscal year. The budget supports higher education, research institutes, and funding agencies to develop a cohesive and long-term plan. The Higher Education, Science, Research and Innovation Policy Framework includes the following four strategic platforms: Human Resources (HR) and Knowledge and Institution Development; RDI (Research Development and Innovation) for Grand Challenges; RDI for Competitiveness; and RDI for Area-based Development and Inclusiveness (to reduce disparity and poverty). Also, there is a cross-cutting platform for the reinventing of the university and research systems. The four strategic platforms include 17 implementing programs. Platform 1 deals with building up HR capabilities; platform 2 focuses on big challenging problems of the country (e.g., air quality, waste/water management, aging society); platform 3 is linked to the industry and service sector, including large companies and start-ups; and platform 4 promotes community wellness, sustainable development, and poverty eradication. The cross-cutting platform includes programs for reinventing the university and research systems, and also COVID-19 and emergency preparedness. There are seven funding agencies, including the three new Program Management Units (PMU) A, PMU-B, and PMU-C. PMU-B is mainly focused on platform 1 on brain/manpower and human resources. Dr. Kirtikara looks forward to working with e-ASIA and promoting science and technology.

**Recognition of NSTDA for their continued support to the Program Secretariat**

- 5) Ms. Kaneko recognized NSTDA for hosting the Program Secretariat since October 2014 and for their continued support. She mentioned the issue of whether the Program Secretariat should remain in Thailand or relocate to another country. The Philippines and Vietnam expressed interest in hosting; however, the Program Secretariat decided to stay for another three years at NSTDA because there are six MOs based in Thailand and it is not practical to relocate during the pandemic. NSTDA kindly extended the MOU with JST to a 3<sup>rd</sup> term for the e-ASIA JRP secretariat office located at Thailand Science Park near Bangkok. Ms. Kaneko thanked Prof. Prasit Palittapongarnpim and the NSTDA team for their continued support. Mr. Handley also added his thanks and appreciation. Prof. Prasit of NSTDA said that it is an honor to work with and host the Program Secretariat and there is a need to further discuss the relocation and long term plan.

#### **Discussion on Topics and Schedule for 10<sup>th</sup> Calls for Proposals**

- 6) Mr. Kobayashi showed the proposed schedule for the 10<sup>th</sup> Calls for Proposals and said four months are needed for the proposal review period. The joint review meeting will be held around August/September next year. He asked if the MOs can agree with this schedule, which is a similar timeline as last year, but there will need to be enough time for evaluation, including eligibility and other review procedures, and the funding decision. The aim is to launch in December, which is one month ahead of last year. Mr. Handley mentioned that although it is an ambitious schedule, it makes good sense given the pandemic. Other MOs wrote via chat that they are supportive of the proposed timeline for 10<sup>th</sup> Calls for proposals. The target to launch the Calls is the middle of December.

The following is the proposed timeline:

| <b>Event</b>               | <b>Schedule of 10<sup>th</sup> call</b> |
|----------------------------|---|
| Set call title and text    | 12 October 2020                         |
| Document preparation       | Middle of October – November 2020       |
| Submission of LoI          | End of November 2020                    |
| Open call                  | Middle of December 2020                 |
| Close call                 | End of March 2021                       |
| Review by MOs              | April – July 2021                       |
| Joint Review Meeting       | ABM 2021 (Aug. or Sept.?)               |
| Announcement to applicants | End of November 2021                    |
| Contract preparation       | December – February 2022                |
| Start funding              | January – March 2022                    |

7) **Health Research – Working Group (WG):** Mr. Masahiko Noda of AMED presented the outcomes of the WG activities. There are two WG objectives: to define research scope and to develop long-term call strategy. He showed a list of WG participants that included AMED, HRC, NHMRC, NIAID, NCI, NRCT, NSTDA, DOST, and MOHS of Myanmar. Before the Board Meeting, four WG meetings were convened. From the discussions, AMED gathered and mapped key areas of common interest with respect to research areas and approaches. Research areas suggested included infectious diseases and chronic diseases, with a focus on cancer. The WG also discussed potential approaches for the next call or associated activities (e.g., workshop). Then he shared an example of an infectious disease-chronic diseases interaction, such as tobacco aggravation of COVID-19 and cause of lung cancer. Also, he showed completed and ongoing e-ASIA JRP projects on infectious diseases and cancer and the need to consider these ongoing efforts. Mr. Noda also showed the mapping of e-ASIA projects from basic to applied to clinical to societal applications. After considering all this information, he

presented a list of potential research scope topics and the 10<sup>th</sup> call guideline framework and a slide of the long-term strategy developed with MO input. The next steps and future activities of the Health Research Program, include opening the call, organizing a workshop, and issuing a series of calls, to achieve the outcome of prevention, treatment, and diagnosis of diseases, which coincide with outcomes of the WG discussions/meetings. Mr. Handley noted that NIAID is happy to work on drafting guidelines and welcomes additional assistance and partnership from other interested Board Members/MOs and the WG, and will build off previous guidelines and work with others to put this together, including AMED. The guidelines to be developed are specifically for infectious and chronic diseases. Mr. Noda is eager to hear the MO's opinion by email to AMED or to the e-ASIA Secretariat. Prof. Sunny Collings of HRC volunteered Fiona Kenning to be part of the drafting group. Dr. Paul Pearlman of NCI also volunteered to join the drafting team to widen the scope beyond cancer associated with chronic infections, especially to include topics such as tobacco control research.

- 8) **Open discussion for other priority topics:** Before the Annual Board Meeting, the Program Secretariat asked all MOs to provide input on priority topics for the 10<sup>th</sup> call for proposals using the questionnaire form. Mr. Kobayashi summarized the priority topics submitted by 16 MOs. Each topic needs to be supported by three or more MOs/countries. Very few proposals were received in the 9<sup>th</sup> call for some topics, such as nutrition, so there is a need to consider how to increase the number of proposals, which might involve more networking activities. Mr. Kobayashi summarized the candidate topics, which were further discussed.

| Candidate Topics | MOs |
|------------------|-----|
|------------------|-----|

|  |  |
|--|--|
| Health Research<br>- Infectious Diseases (WG), Cancer                                | ID: NHMRC, AMED, LMOST, HRC, DOST, NRCT, NSTDA, TCELS, NCI, NIAID, CA:NHMRC, AMED, MOE, TCELS, NCI |
| Materials<br>- Material Informatics  | JST, DOST, NSTDA   |
| Alternative Energy<br>- Renewable Energy, Hydro power                                | LMOST, NRCT*   |
| - Energy Storage System  | DOST, VMOST*   |
| Agriculture<br>- Functional Food for Nutrition                                       | LMOST, DOST, ARDA  |
| Disaster Risk Reduction and Management combined with Environment<br>- Climate Change | LMOST, RFBR*   |

\*Need 3<sup>rd</sup> country/MO to join

The Philippines PCHRD/DOST will support infectious diseases and chronic diseases, and if more specificity is needed, they also want to include STDs. Singapore A\*STAR would like to name an expert to join the infectious disease call and will send the name by email. Cambodia MOH also works on infectious diseases and would like to join this area.

- 9) **Materials:** Mr. Masaki Sato of JST presented proposed call topics in the area of Materials (nanotechnology). Mr. Sato proposed the following priority topics: materials informatics (materials research by information science) and advance material research by utilizing computers. He presented some research area examples, including material research by utilizing computer tools or platforms (e.g., predict chemical reactions by computer simulation); material research by utilizing data science (e.g., search for element combinations of new materials); and computational science research in the materials field (e.g., conduct calculations for material sciences). Mr. Sato showed two approaches in materials sciences: 1) forward (traditional) approach through various experiments and 2) inverse approach which is more efficient through



using required properties of materials and applying data science (this is a new process). JST promotes the inverse approach for scientists in participating e-ASIA countries. Previous calls in Materials field primarily focused on research on physical properties, and this is why JST would like to propose this new approach in material sciences and new focus topics. A potential materials informatics collaboration in e-ASIA would include an interdisciplinary team. With A\*STAR and other MOs, JST hopes to host/organize a workshop on materials informatics in Singapore from January 13-14, 2021, either in person or online. Mr. Sato provided examples of material informatics research in Japan, and also an example of a collaboration with Singapore and Thailand. He also mentioned that other countries, such as Malaysia, Vietnam, and other ASEAN countries working in this area.

- 10) Dr. Teruo Kishi of JST and Chair of the SAC is an expert in materials science. He commented that research related to materials informatics is actively being promoted, and JST would like to raise the level of this new research area by promoting collaboration with e-ASIA countries. He hoped that MOs agree with JST's proposal to participate in this call and the upcoming workshop in Singapore. Dr. Osamu Aruga of MEXT expressed support for this area since materials science is one of the most important research areas in Japan. Materials informatics is a new approach that could potentially change the state of materials science. International collaboration is expected to contribute to the enhancement in this field of study, and the e-ASIA JRP could add value in this field. Ms. Kaneko asked for any other comments from VN MOST, NSTDA, or other MOs regarding JST's suggestion. Dr. Rowena Guevara of DOST expressed her appreciation for Dr. Kishi's expertise and Japan's lead in this area. She commented that they very much want to join the call for materials informatics and would also like to participate in the workshop in 2021. JST will take the lead in drafting the call guidelines.

- 11) **Alternative Energy:** There were several topics submitted. The Program Secretariat suggested shifting the topic of energy storage materials submitted by VMOST under Materials to Alternative Energy instead. Ms. Kaneko invited comments. For Renewable Energy, because NRCT is heavily engaged with COVID-19, they would like to withdraw from this area. DOST proposed the topic of Energy Storage Systems, because there is a great need to store renewable energy. Ms. Kaneko reminded the MOs that there needs to be at least three countries to join this topic, and to immediately contact the Program Secretariat if there are any MOs interested. If there is not a third country, this topic cannot move forward.
- 12) **Functional Food:** The Program Secretariat noted that there was a lack of proposals in the 9<sup>th</sup> call and encouraged MOs to attract more applications, such as organizing networking workshops. PMU-B's interest is slightly different from what has been posted. They are interested in looking at the mechanisms for plant food in terms of resilience and adaptation with climate change. ARDA is interested in nutrition, including malnutrition and under- and overweight, and functional food. Ms. Kaneko asked if any MOs would like to take the lead in drafting the text. ARDA volunteered to be the lead agency in coordinating with other MOs and in drafting the call guidelines for this area.
- 13) **Disaster Risk Reduction and Management and Environment:** This year RFBR proposed to combine Disaster Risk Reduction and Management and Environment under the umbrella of Climate Change. The suggested topic of water resources management could also be included under Climate Change. Ms. Kaneko asked for comments on the suggested topics listed in the questionnaire, but there were none. Unless there are any objections, these two fields will be combined. Ms. Kaneko asked if anyone would like to join, but there was no response. Laos MOST and RFBR were not present. They will have to decide who will take the lead, unless

anyone else wants to do it. The Program Secretariat will follow-up with Laos MOST and RFBR; however, if there is no third party, this cannot proceed. If a third party is interested, they should inform the Program Secretariat. (Note: In the closing section, Indonesia expressed interest in joining.)

- 14) **Advanced Interdisciplinary Research towards Innovation:** There were no topics that attracted multiple MOs. Dr. Guevarra commented that because everyone is focused on COVID-19 that this topic could be omitted this year. PMU-B, expressed interest, particularly on the interface between information/computer and the future application of software and hardware on the disabled and aging society. They hope they can attract other MOs to join. If there is interest, contact the Program Secretariat as soon as possible.
- 15) **Summary of lead MOs:** Health Research – AMED, HRC, NCI and NIAID; Materials Informatics – JST; and Agriculture – ARDA. For the other areas, if there is interest in joining to contact the Program Secretariat by one week from now. The call for proposals guidelines need to be completed by October (one month from now).

#### **Discussion on Working Group Scheme**

- 16) Mr. Kobayashi presented the Working Group (WG) scheme to address the challenges of 1) how to incorporate expert input and 2) how to improve the call management process to consider long-term strategies and calls with many high-quality proposals. This was discussed at last year's ABM in Bangkok, and the Board agreed to have a continuous discussion and implement pilot activities decision. Based on this decision, AMED established a Health WG, resulted in focused discussion on infectious diseases, working with other MOs. He showed the timeline of the WG scheme that included: pre-call stage (e.g., developing the scope and networking); call stage; and project stage. This process will take 5-6 years. This year's pilot focused on the

pre-call stage. He presented lessons learned from the pilot. The pilot WG provided a good opportunity to discuss long-term strategies and included opinions from experts, who addressed the two challenges mentioned earlier. The lessons learned focused on the need for flexibility with the WG scheme, including flexibility to choose the project management process or WG scheme that does not burden MOs, and flexibility with WG member selection and activity (e.g., some MOs did not include experts). From these lessons, the Program Secretariat would like to propose 1) WG scheme to be launched as an optional call-management scheme and 2) WGs have the flexibility to adopt or omit certain aspects of the scheme as they wish (e.g., participation only in pre-call stage). In summary, the suggestion is that the WG scheme is an optional approach to help improve the call management process and MOs could engage with any specific aspect. Dr. Guevarra of DOST supported the Program Secretariat's proposal and agreed with the flexible approach as an option to improve the process and give flexibility with the scheme. Dr. Sirasak Tepakum of TCELS also agreed with the proposal and needs for more flexibility, especially for the topic relevant for the current COVID-19 crisis and need to include this category. Future trends to consider for e-ASIA that TCELS are interested in including medical artificial intelligence, and analysis and utilization of big data; they would like to discuss this further. The Program Secretariat will draft guidelines for optional WG and setting up WGs for other research areas beyond Health. If there is an MO interested in setting up a WG, the MO should submit the proposal form by the end of the year (a year before the 11<sup>th</sup> call is launched). In the chat box, Prof. Prasit of NSTDA also supported the WG proposal. Prof. Ocky Karna Radjasa of RISTEKBRIN would like to support in the Environment field the topic of marine litter and microplastic; and therefore, Indonesia will be the third country in this area.

## **Closing**

17) The Program Secretariat took group photos/screenshots. Also, it was reiterated that the Board will vote on various agenda items, including projects for the 9<sup>th</sup> Call of Proposals, via exchange of email by the end of September. The next meeting (September 11, 2020; 10:00-12:00 Thai Time) will focus on the Joint Review Meeting on 9<sup>th</sup> Call in the field of Health. The Program Secretariat closed the meeting and looked forward to the MOs' continued support of e-ASIA. Participants said their thanks and goodbyes.

**Appendix**  
**Participant List**

■ Board Members / Representatives

| #  | Country     | Organization | Name                                   | Title  |
|----|-------------|--------------|--|--|
| 1  | Australia   | NHMRC        | Ms. Prue Torrance                      | Executive Director, Research Quality & Priorities                          |
| 2  | Cambodia    | MISTI        | Dr. Kouk Fidero                        | General Director of National Institute of Science, Technology & Innovation |
| 3  | Indonesia   | RISTEK/BRIN  | Prof. Ocky Karna Radjasa (Board)       | Director of Research and Community Service                                 |
| 4  | Japan       | MEXT         | Dr. Osamu Aruga                        | Director, International Science and Technology Affairs Division            |
| 5  | Japan       | AMED         | Mr. Masahiko Noda (Board)              | Managing Director, Department of International Strategy                    |
| 6  | Japan       | JST          | Mr. Osamu Kobayashi                    | Director, Department of International Affairs                              |
| 7  | Malaysia    | MOSTI        | Mr. TEOH PHILIP (Board)                | Undersecretary, International Division                                     |
| 8  | Myanmar     | MOE          | Dr. Phyu Phyu Win                      | Deputy Director General of the Department of Research and Innovation (DRI) |
| 9  | New Zealand | HRC          | Professor Sunny Collings (Board)       | Chief Executive  |
| 10 | Philippines | DOST         | Dr. Rowena Cristina L. Guevara (Board) | Undersecretary for Scientific and Technological Services and OIC           |
| 11 | Singapore   | A*STAR       | Prof. Reginald Tan (SAC)               | Executive Director (Research) , A*STAR Science and Engineering Council     |
| 12 | Thailand    | ARDA         | Ms. Kunvara Chotiphansophon (Board)    | Deputy Director  |
| 13 | Thailand    | NRCT         | Ms. Tiwa Ngaowichit                    | Director, Division of International Affairs                                |
| 14 | Thailand    | NSTDA        | Prof. Prasit Palittapongarnpim (Board) | Executive Vice President   |
| 15 | Thailand    | TCELS        | Dr. Sirasak Tepakum                    | Deputy CEO   |

|    |          |       |                                |  |
|----|----------|-------|--------------------------------|--|
| 16 | Thailand | PMU-B | Dr. Kanyawim Kirtikara         | Director   |
| 17 | USA      | NCI   | Dr. Paul C. Pearlman (Board)   | Program Director, National Cancer Institute                      |
| 18 | USA      | NIAID | Mr. Frank Gray Handley (Board) | Associate Director for International Research Affairs            |
| 19 | Viet Nam | MOST  | Ms. Le Thi Viet Lam (Board)    | Deputy Director General, Department of International Cooperation |

■ e-ASIA JRP Scientific Advisory Council

|    |       |         |                   |  |
|----|-------|---------|-------------------|--|
| 20 | Japan | SAC/JST | Prof. Teruo Kishi | Chair of the Scientific Advisory Council |
|----|-------|---------|-------------------|--|

■ e-ASIA JRP Secretariat

|    |             |  |                         |                                    |
|----|-------------|--|-------------------------|------------------------------------|
| 21 | Secretariat |  | Ms. Emi Kaneko          | Secretary-General, e-ASIA JRP      |
| 22 | Secretariat |  | Mr. Yoshihide Kobayashi | e-ASIA Special Program Coordinator |

■ Other Participants

|    |           |             |                              |  |
|----|-----------|-------------|------------------------------|--|
| 23 | Australia | NHMRC       | Dr Adam Chapman              | Director, Priorities and International Engagement  |
| 24 | Australia | NHMRC       | Mr Trent Greentree           | Assistant Director, Priorities and International Engagement  |
| 25 | Cambodia  | MISTI       | Mr. Vanthou CHORN            | Deputy Director, Department of Planning, Statistics, Cooperation & ASEAN affairs                                 |
| 26 | Cambodia  | MOH         | Mr. TEK Bunchhoeung          | Pharmacist, Department of Communicable Disease Control   |
| 27 | Indonesia | RISTEK/BRIN | Mr. Adhi Indra Hermanu       | Deputy Director For Basic Research   |
| 28 | Indonesia | RISTEK/BRIN | Ms. Anggun Amalia Fibriyanti | Staff of Basic Research  |
| 29 | Japan     | MEXT        | Ms. Fumie Hara               | Senior Specialist for International Research Coordination, International Science and Technology Affairs Division |
| 30 | Japan     | MEXT        | Ms. Aya Kontani              | Administrative Researcher, International Science and Technology Affairs Division                                 |
| 31 | Japan     | AMED        | Dr. Yuriko Suzuki            | Director, Office of International Collaboration, Division of International                                       |

|    |             |              |                           |   |
|----|-------------|--------------|---------------------------|---|
|    |             |              |                           | Strategy, Department of International Strategy  |
| 32 | Japan       | AMED         | Dr. Amy Tomita            | Deputy Manager, Division of International Strategy, Department of International Strategy  |
| 33 | Japan       | AMED         | Ms. Yukiko Watanabe       | Section Chief, Office of International Collaboration, Division of International Strategy, Department of International Strategy  |
| 34 | Japan       | AMED         | Dr. Naoko Kojima          | Deputy Manager, Office of International Collaboration, Division of International Strategy, Department of International Strategy |
| 35 | Japan       | JST          | Mr. Masaki Sato           | Manager, Department of International Affairs  |
| 36 | Japan       | JST          | Ms. Hiromi Oaku           | Deputy Manager, Department of International Affairs   |
| 37 | Japan       | JST          | Mr. Masayoshi Higuchi     | Chief, Department of International Affairs  |
| 38 | Japan       | JST          | Mr. Hiroshi Kambegawa     | Senior Program Coordinator, Department of International Affairs   |
| 39 | Japan       | JST          | Mr. Hideaki Kodani        | Senior Program Coordinator, Department of International Affairs   |
| 40 | Japan       | JST          | Ms. Junko Katayama        | Program Coordinator, Department of International Affairs  |
| 41 | Malaysia    | MOSTI        | Ms. HASLINDA ABDUL RAZAK  | Principal Assistant Secretary, International Division   |
| 42 | Malaysia    | MOSTI        | Mr. AL - ARIF ABDUL RAHIM | Assistant Secretary, International Division   |
| 43 | New Zealand | HRC          | Fiona Kenning             | Research Investment Manager - International   |
| 44 | Philippines | DOST-PCAARRD | Dr. Synan S. Baguio       | Director, Livestock Research Division   |
| 45 | Philippines | DOST-PCAARRD | Engr. Eduardo V. Manalili | Director, Inland Aquatic Resources Research Division  |
| 46 | Philippines | DOST-PCIEERD | Mr. Raul Sabularse        | Deputy Executive Director of the Philippine Council for Industry, Energy and Emerging Technology (DOST-PCIEERD) and OIC         |
| 47 | Singapore   | A*STAR       | Dr. Zong Yun              | Deputy Director, A*STAR Research Excellence & Strategy Office   |
| 48 | Thailand    | ARDA         | Ms. Somying Teeradech     | Director of Department of Executive Director and Communication  |



|    |          |       |                              |  |
|----|----------|-------|------------------------------|--|
| 49 | Thailand | ARDA  | Mr. Torlarb Thanvareerat     | Secretary of Executive   |
| 50 | Thailand | NRCT  | Ms. Arpar Nateprapai         | Foreign Relation Officer, e-ASIA coordinator   |
| 51 | Thailand | NSTDA | Dr. Lily Eurwilaichitr       | Vice President, International Collaboration  |
| 52 | Thailand | NSTDA | Ms. Monta Thammasatta        | Program Director, International Collaborative Project Appraisal and Evaluation Section |
| 53 | Thailand | NSTDA | Ms. Mullika Kulsiripruck     | International Relations Officer, International Collaboration                           |
| 54 | Thailand | NSTDA | Ms. Anongnart Khawsang       | Analyst, International Collaborative Project Appraisal and Evaluation Section          |
| 55 | Thailand | TCELS | Ms. Premruedee Lertsakvimarn | Senior Manager   |
| 56 | USA      | NIAID | Ms. Gayle Bernabe            | Regional Program Officer, Office of Global Research                                    |
| 57 | Viet Nam | MOST  | Ms. Bui Thi Thu Lan          | Head of Division, Department of International Cooperation                              |
| 58 | Viet Nam | MOST  | Ms. Hoang Minh Hang          | Official, Department of International Cooperation                                      |