Cooperation with America and Europe regarding "the Moonshot Research and Development Program" (Report of business trip to America and Europe, made by Mr. Takuya Hirai, Minister of State for Science and Technology Policy)

Document 1-1

1. America

- **Joint High Level Committee Meeting on Science and Technology Cooperation Between the Government of the United States of America and the Government of Japan** was held on May 2, 2019 in Washington, DC. (Co-Chairs: Mr. Takuya Hirai (Minister of State for Science and Technology Policy, the Cabinet Office), Mr. Masahiko Shibayama (Minister of Education, Culture, Sports, Science and Technology), Dr. Kelvin Droegemeier (Director of the White House Office of Science and Technology Policy (OSTP)), and Mr. Michael Kratsios (Deputy Assistant to the President for Technology Policy and Deputy U.S. Chief Technology Officer))
- In the committee, **"the Moonshot Research and Development Program" was introduced. Minister Hirai called on the U.S. side to start discussion on research collaboration** (discussion on the collaboration framework between relevant organizations, and holding workshops).
- **The U.S. side** showed **a keen interest in this issue, and agreed to start discussion on research collaboration**. The joint statement included the start of discussion.

2. EU

- **Minister Hirai held talks with Carlos Moedas, Commissioner for Research, Science and Innovation,** on May 3, 2019, in Brussels.
- They shared the recognition that **"the Moonshot Research and Development Program"** and **"Horizon Europe"** which is scheduled to start in 2021 by EU have the same direction.
- **They agreed to carry forward discussion on the cooperation and collaboration between both programs**. The expectation of future expansion of collaboration was referred in the joint press release.

May 2, 2019

JOINT STATEMENT:
JOINT HIGH LEVEL COMMITTEE MEETING ON SCIENCE AND TECHNOLOGY COOPERATION BETWEEN THE GOVERNMENT OF THE UNITED STATES OF AMERICA AND THE GOVERNMENT OF JAPAN

Pursuant to a shared goal of continuing to advance science and technology cooperation and further strengthen the U.S.-Japan relationship, the Government of the United States of America and the Government of Japan met for the 14th Joint High Level Committee (JHLC) Meeting on Science and Technology (S&T) Cooperation on May 2, 2019 in Washington, DC. This high-level meeting demonstrated the strong mutual commitment of two of the world's most technologically advanced nations to enhance their bilateral S&T cooperation.

This year, the U.S. delegation was co-chaired by Dr. Kelvin Droegemeier, Director of the White House Office of Science and Technology Policy (OSTP) and Mr. Michael Kratsios, Deputy Assistant to the President for Technology Policy and Deputy U.S. Chief Technology Officer. The Japanese delegation was co-chaired by Mr. Takuya Hirai, Minister of State for Science and Technology Policy, the Cabinet Office, and Mr. Masahiko Shibayama, Minister of Education, Culture, Sports, Science and Technology. The U.S. delegation brought together representatives from the White House, Department of Energy, National Institute of Standards and Technology, National Science Foundation, Department of Health and Human Services, and Department of State. The Japanese delegation included participants from the Cabinet Office, Ministry of Education, Culture, Sports, Science and Technology, Ministry of Foreign Affairs and National Institute of Information and Communications Technology.

This iteration of the JHLC strengthened collaboration between the two countries from a broad strategic perspective and emphasized a whole-of-government approach to S&T issues. U.S.-Japanese cooperation provides the basis for scientific, technological, and economic progress that benefits both nations. To date, joint initiatives have led to new ideas and advancements in such fields as particle physics, advanced computing, fusion plasma, materials discovery, natural resources, neuroscience, space, cancer biology, and natural disaster resiliency.

The JHLC was divided into two tracks: science and technology. Each track opened with a discussion of national policy and research areas of common interest. Representatives reviewed recent cooperation across a wide range of scientific disciplines, such as energy-related research and bioscience, including precision medicine. The technology track focused on advancing industries of the future, specifically quantum science and technology and artificial intelligence (AI). Discussions also highlighted efforts to enrich domestic innovation ecosystems; the development of STEM-related human capital and industrial training; principles and ethics in the social implementation of AI and other emerging technologies; the role of bilateral cooperation in protecting and promoting advancements in science and technology; and joint efforts to encourage S&T initiatives at the upcoming G20 Summit and beyond. The delegations conveyed the importance of bilateral space cooperation, which will be further addressed in the U.S.-Japan Comprehensive Dialogue on Space scheduled for the summer of 2019.

Both sides encouraged science and technology stakeholders to explore new avenues for collaboration under the Government of Japan's Moonshot Research and Development Program as it takes shape. The program aims to solve difficult issues in contemporary society by facilitating highly transformative S&T concepts and promoting international cooperation.

Given the many policy and research priorities, both the United States and Japan expressed enthusiasm for a bilateral Joint Working Level Committee (JWLC) meeting on science and technology cooperation to advance the identified action items. The next JWLC, set to take place in 2020, will be co-led by the Japanese Ministry of Foreign Affairs and the U.S. Department of State with the participation of the related ministries and agencies of both countries.

Joint press statement– Brussels, 3 May 2019

Strengthening EU-Japan cooperation in artificial intelligence, research and innovation

Today, **Andrus Ansip**, European Commission Vice-President for the Digital Single Market, and **Carlos Moedas**, Commissioner for Research, Science and Innovation, met **Takuya Hirai**, Japan's Minister of State for Science and Technology Policy.

Vice-President **Ansip** and Minister **Hirai** discussed bilateral cooperation to promote a human-centric approach to artificial intelligence (AI), building on the joint statement of the 26th EU-Japan summit which took place on 25 April.

Vice-President **Ansip** and Minister **Hirai** said after their meeting:

"The speed of AI's development and the global changes that it entails are at the heart of EU-Japan cooperation. It is not only important to advance and progress in AI, but also to develop and promote human-centric and ethical approaches in technologies as a basis for the development and deployment of AI. In this way, we can build trust, encourage people's understanding and acceptance of AI and develop societies that embrace it.

In this regard, we welcome two publications: Japan's "Social Principles of Human-Centric AI" and the European Commission's Communication on Building Trust in Human-Centric AI.

Our approaches share common values and aims. Japan has set out seven principles: (1) human-centric, (2) education, (3) privacy, (4) security, (5) fair competition, (6) fairness, accountability, transparency and (7) innovation. These will form the basis for creating a human-centric "Society 5.0" that can successfully combine cyber space with physical space. They go hand in hand with the seven key requirements that the Commission supports to develop AI that people can trust: (1) human agency and oversight, (2) technical robustness and safety, (3) privacy and data governance, (4) transparency, (5) diversity, non-discrimination and fairness, (6) environmental and societal well-being and (7) accountability.

Our common work on data and trust is essential for the successful development and deployment of AI.

The European Union and Japan will continue to work closely together to promote international common understanding on AI ethics/principles, in international fora such as the G7 and G20."

Today's discussions also aimed to prepare the ministerial meetings on digital of the G7 and G20 respectively taking place in Paris on 15 May and in Japan on 8-9 June. Vice-President **Ansip** will participate in both events.

Commissioner **Moedas** and Minister **Hirai** Carlos Moedas agreed that the latest developments in respective research and innovation policies present new opportunities to continue strengthening EU-Japan cooperation.

Commissioner **Moedas** and Minister **Hira**i said after their meeting:

"The EU is preparing to launch its new research and innovation programme, Horizon Europe. The new Japanese Moonshot Research & Development Programme, at the same time, promotes R&D for disruptive innovation and targets solutions to ambitious social and economic challenges. With the introduction of these new programmes on both sides, we expect EU-Japan cooperation in science, technology and innovation to increase in areas of mutual interest, in line with last year's EU-Japan Strategic Partnership Agreement."

As part of the 26th EU-Japan Summit on 25 April, both sides committed to extending the co-funding of joint projects and welcomed the new arrangement to provide opportunities for collaboration between researchers from the European Research Council and Japan Science and Technology Agency.