

EU-JAPAN CENTRE FOR INDUSTRIAL COOPERATION 日欧産業協力センター

Seminar Report

"EU-Japan Space Business Week Workshop" Sapporo 7 September, 2017

As a part of the "EU-Japan Space Business Week LINK & LAUNCH" project, the EU-Japan Centre for Industrial Cooperation and the Japan Space Systems (JSS) coorganized a workshop on EU-Japan cooperation in space industry on 7 September 2017 in the Northern city of Sapporo. Main purposes of the workshop were to introduce the technological abilities of European companies in the Earth Observation (EO) field to potential Japanese clients and to help EU participants to understand Japanese user demand in downstream EO applications.

In the opening address, Mr. Fabrizio Mura, Deputy General Manager of the EU-Japan Centre explained the EU's role in building European space economy in order to maximize the utilization of big data from the newly built satellite/space infrastructure.

Mr. Yoshiharu Kunogi, President of Japan Space Systems, touched upon JSS's recently signed memorandum of understanding (MoU) with the European Association of Remote Sensing Companies (EARSC), which enabled JSS to cooperate more closely with the European EO industry. JSS has agreed to join forces with the EU-Japan Centre in running the Copernicus Relays Helpdesk in Japan, started in April 2017.

Mr. Seiyu Aoki of the Hokkaido Government gave a keynote speech on the industry in Hokkaido and its approach to space industry. Mr. Aoki first of all pointed out that Hokkaido is one of the leading food supplying region in Japan. Its agricultural output (US \$11 billion) and arable land area (1.15 million ha) are the largest in Japan. As for the EO data utilization, Mr. Aoki explained that remote sensing data are used for wheat growth control, rice protein analysis, etc. and positioning data are used in the development of autonomous traveling system for tractors. According to Mr. Aoki, Hokkaido is at the forefront of small rocket development by private companies in Japan and it is a suitable location for rocket launch, having open area to the south and east. He concluded his presentation in expressing his hope that the development of space industry will contribute more to local economies and international cooperation.

Mr. Gergely Antal Sulyok, First Secretary at the Delegation of the European Union to Japan introduced "EU's Vision of Space Industry." He indicated that Europe is a major

player in space with second biggest public budget in the world and owns world-class space systems, i.e. Copernicus for earth observation and Galileo/EGNOS for satellite navigation.

Prof. Ryosuke Shibasaki of the Center for Spacial Information Science, University of Tokyo spoke on the "Data Utilization in the Geospacial Society" in his keynote speech. According to Prof. Shibasaki, geospacial information became more often used since the Great East Japan Earthquake in 2011, leading to the appearance of the "world changing" services thanks to the integration of public data with that of private origin and improvement of data available frequency to the "real" time. Prof. Shibasaki pointed out that spatial infrastructure is indispensable to enhance resilience against natural disasters because it receives little influence of incidents on earth. Thanks to rapid technological progress, ordinary people can get a commanding "bird's'-eye view" easily, he said. According to Prof. Shibasaki, artificial intelligence (AI) can contribute to help make a rational decision at a time of calamity. In this respect, data accumulation for the "deep learning" is critically important in order to improve the quality of assistance provided by the AI.

Mr. Noritoshi Kamagata, Manager for Geospatial Application Promoting, Smart Agriculture Support Service of Kokusai Kogyo Co., Ltd. spoke about EO data use in pasture grass diagnostic service for dairy farms. Mr. Kamagata is Project Associate Professor at the Rakuno Gakuen University, too. He explained how useful the EO data in analyzing pasture grass quality and terrain assessment of fields. He indicated a shortage of human resources as a challenge in further utilization of the EO data. He pointed out two obstacles in the use of remote sensing data until now, i. e. delay in data analysis and the high cost, both of which he anticipates improve in near future.

After the presentation of six European participants in EO service, there were very active exchange of views with Japanese audience. Japanese audience wanted to know for example, the possibility of using EO data in the field of caring the elderly and water supply business. They raised questions on the frequency of availability of analyzed data and cost incurred for this kind of services. Some suggested the combination of EO data with information obtained by using drones for higher value added.

At the end, European participants expressed their appreciation of the discussion which helped them to know more about possible application of the EO data in Japan. They are determined to renew contact with possible Japanese clients and business partners because they recognized the vast potential of the Japanese market and technologies in a wide range of activities including agriculture, disaster management, infrastructure and transportation. The Japanese side showed interest in learning more about the EO data utilization in the EU, centering around the downstream sector, especially for their timely availability and incurring cost.

Prepared by Toshiro Fukura, Manager, Policy Seminars and Analysis