



EU-JAPAN CENTRE FOR INDUSTRIAL COOPERATION

日欧産業協力センター

Seminar Report

“Space Industry Symposium”

Tokyo 6 September, 2017

The EU-Japan Centre for Industrial Cooperation co-organized a symposium on space industry on 6 September 2017 in Tokyo, together with the Japan Space Systems (JSS). It was a part of the special project titled “EU-Japan Space Business Week LINK&LAUNCH” consisting of various programs, for which organizers invited a total of six European companies/organizations, working in the Earth Observation (EO) field. They showed eagerness in business tie-ups with Japanese counterparts and expressed their wish to know more about the needs of Japanese EO end users. The symposium attracted a large number of participants (approximately 250), reflecting strong interest in bi-lateral cooperation.

In the opening remarks, Mr. Silviu Jora, General Manager of the EU-Japan Centre for Industrial Cooperation pointed out that the prospect for bi-lateral cooperation has become brighter since the start of the EU-Japan Space Policy Dialogue in October 2014. Mr. Hiromasa Nakaguro, Chairman of the JSS declared that they would promote utilization of the EO data both in Japan and the EU, working as a supporting organization of the Copernicus program, using various tools including special collaborative relationship with the European Association of Remote Sensing Companies (EARSC).

There were two keynote speakers – one from Japan, the other from the EU. Mr. Masanori Tsuruda, Director, Space Industry Office, Ministry of Economy, Trade and Industry (METI) gave speech on the Japanese space industry policy which was subtitled, “Space industry in the big data era”. He indicated that the quality and quantity of the data derived from space were improving dramatically. According to Mr. Tsuruda, application business which will provide the solution for user industries is expected to develop rapidly, by integrating ground data and “space data.” He pointed out that the collaboration between Europe (Galileo) and Japan (QZSS) is vital to stimulate the world’s GNSS market and to incubate new business which can bring a variety of benefits to end users in the world. Therefore, he said that the METI welcomes the MOU signed in March 2017 between Europe and Japan in order that Europe and Japan may accelerate the GNSS application.

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. He explained that the EU space strategy has four priorities - 1) Maximize the benefits of space for society and the EU economy, 2) Foster a globally competitive and innovative European space sector, 3) Reinforce Europe's autonomy in accessing and using space in a secure and safe environment, and 4) Strengthen Europe's role as a global actor and promote international cooperation.

Mr. Tomoki Muramatsu of H.I.S. Co. Ltd. spoke about space data utilization in tourism. According to Mr. Muramatsu, an "Open Innovation system", consisting of both big and small (start-up) companies and local government is suitable for the effective use of space data in tourism. Three-dimensional images developed from the space data become more useful for cycling and trekking when combined with information on the global positioning.

Dr. Eiji Sakaiya, Manager of the Aomori Prefectural Industrial Technology Research Center introduced examples of satellite data utilization in agriculture for supporting the production of high-quality brand rice, "SEITEN NO HEKIREKI." Dr. Sakaiya, first of all clarified the conditions for delicious rice as (1) Harvesting at the optimum time and (2) Keep low protein content in rice grains. According to him, benefits of using satellite data is that we can know the condition of over 10,000 paddy fields per day while only a few places can be surveyed with the conventional method of checking in the field. In the growing of "SEITEN NO HEKIREKI", using satellite data started in 2016. Prefecture government and agricultural cooperatives give advices to farmers on cultivation management based on satellite data. Thanks to these efforts, the selling price of "SEITEN NO HEKIREKI" is 1.5 times higher than other varieties cultivated in the same area. Dr. Sakaiya predicts that it will become easier to use space data in agriculture by improving satellite performance such as increase in observation frequency.

Mr. Fabrizio Mura, Deputy General Manager of the EU-Japan Centre for Industrial Cooperation introduced the structure of the Copernicus Relays. It is in place since the first quarter of 2017, having more than 60 organizations now. Copernicus Relays coordinate, communicate and promote activities around the Copernicus Program, the EU's earth observation program, for its benefits and opportunities for local residents and businesses.

Mr. Hisanobu Takayama, Director General, Strategic Planning Office of the JSS explained the function of the Space Business Court that JSS introduced exactly one year ago. According to Mr. Takayama, the Space Business Court is the only initiative in Japan

that fully supports all phases of new business creation (incubation, acceleration etc), aiming at being a one-stop shop for all information and inquiries related to space business. Mr. Takayama disclosed that a new company and an organization were already born from the consultation service of the Space Business Court.

Mr. Masakatsu Fujimoto of the Yamaguchi Prefectural Industrial Technology Institute explained how they started formulating development basis for space related industry in their region. It was just after the arrival of the Regional Satellite Applications Center for Disaster Management of the Japan Aerospace Exploration Agency (JAXA) in their prefecture in February 2017 as a part of governmental plan to relocate facilities in the region. They established a satellite data analysis technology research group based on the collaboration of JAXA, Yamaguchi University and Yamaguchi Prefecture as core members, with the disaster prevention, new industry creation and space education as main field of activities. The research group promotes cooperation between companies and research institutes for the development of space information industry with the support of the Space Business Court of the JSS.

Mr. Kazuyo Hirose, Director-General of JSS's International Department explained the human resource development program, which was introduced in 2012 to foster engineers of developing countries in the field of space data utilization. He also explained the internship program for Africans (African Business Education Initiative for Youth = ABE Initiative) introduced in 2016, for which one of the participants, Mr. Alberto Armando from Mozambique told his experience.

Mr. Grega Milcinski of Sinergize Ltd. from Slovenia made presentation on a cloud powered satellite image processing tool, Sentinel Hub, which was awarded the 2016 COPERNICUS Master prize. According to Mr. Milcinski, the Sentinel Hub functions as a platform for real-time data processing with a wide variety of applications in agriculture and natural disaster monitoring.

Mr. Takayoshi Fukuyo, Associate Professor at the University of Tokyo's Center for Spatial Information Science chaired the final question and answer session and indicated the following points as conclusion.

- Japan can learn a lot from the Earth Observation system of the EU, Copernicus. Rapidly expanding utilization in the "downstream" sector becomes more and more interesting.
- It deserves closer attention on the development of Copernicus program to know for example, if original data continue to be provided free of charge, how solution providers will charge cost and secure profit, etc.