Committee on the Peaceful Uses of Outer Space 55<sup>th</sup> Session of Scientific and Technical Subcommittee 29 January to 9 February 2018



Agenda Item 4 General Exchange of Views

Madam Chair [Mr. Chairman] and Distinguished Delegates,

On behalf of the University Space Engineering Consortium (UNISEC)-Global, I would first like to congratulate the newly elected chairperson of the Committee Ms. Pontsho Maruping as she assumes this important post. I would also like to recognize Ms. Chiaki Mukai, the former Chairperson of the Scientific and Technical Subcommittee of the Committee on the Peaceful Uses of Outer Space, for her dedicated contribution to STSC. Next, I wish to acknowledge Ms. Simonetta Di Pippo, the Director of the United Nations Office for Outer Space Affairs, and her team for the excellent preparations for this conference. Finally, I express my gratitude to all delegates and observers present at the 55<sup>th</sup> session of the Scientific and Technical Subcommittee of COPUOS.

This is UNISEC-Global's first official attendance as an observer, and I would like to express my sincere appreciation for having been granted Observer Status with this Committee last year. It is an honor to be here.

Madam Chair [Mr. Chairman] and Distinguished Delegates,

UNISEC-Global has promoted practical space projects at the university level since 2013 with the experiences of successful Japanese UNISEC activities that started in 2002. UNISEC-Global is the right organization to bring our aspirations into realization. We started the activities with a desire that

"By the end of 2020, let's create a world where university students can participate in practical space projects in more than 100 countries."

UNISEC-Global consists of Local Chapters across the world, including UNISEC-Japan. At this point in time, 15 countries/regions have established their Local Chapters, and Point of Contacts from 31 countries/regions are exploring possibilities of establishing their own UNISEC entities.

Since our establishment in November 2013, we have provided an opportunity for young people around the world to learn about space and space engineering and to exchange views. There is a UNISEC-Global community in progress to support its activities.

Through UNISEC-Global projects, we have been trying to expand basic space technologies to non-space faring countries, to make easier access to space. I believe that this would contribute to some extent to lessening the existing gap between the "Haves" and the "Have-Nots", which is one of the main objectives of Space 2030 agenda.

Madam Chair [Mr. Chairman],

I would like to highlight some of them here, taking into account the UNISPACE+50 thematic priorities -- particularly No. 7, which is thematic priority of "Capacity-building for the twenty-first century." Let me make a brief introduction.

One of our projects is called the CanSat Leader Training Program (CLTP).

It is a hands-on educational training program using CanSat, a soda-can sized model satellite at first and then, HEPTA-Sat, a more sophisticated model satellite that would bridge the gap between CanSat and CubeSat. Participants can learn the whole process of satellite engineering through design, fabrication, launch and data verification. CLTP aims at ensuring easier and cheaper access to space technology.

Upon completion of the CLTP Course they are expected to play a leading role to disseminate the acquired space knowledge to their compatriots at home. UNISEC-Japan is the main organizer using the UNISEC-Global network, in cooperation with its Japanese-university members. So far, 73 participants from 34 countries have joined in this program since 2011. I hope this program would contribute to Thematic Priority No. 7.

The other example is HEPTA-Sat Training Course. This course is a visiting project to accommodate requests by a host organization. We will dispatch instructors there with several HEPTA-Sats. Participants can receive the hands-on training tailored to their needs. This course is relatively new and was demonstrated at Stellenbosch University in South Africa on December 9-10, 2017 with the help of UNOOSA and the local organizers.

I would like to introduce the two technical competitions that we organize: The Mission Idea Contest for Micro/Nano Satellite (MIC) and the Debris Mitigation Competition (DMC).

The Mission Idea Contest was established in 2010 to provide students and researchers with opportunities to present their creative ideas to use micro/nano

satellites and to achieve some recognition internationally. The results of our contests are compiled. So far, four books have been published as an IAA book series -- in cooperation with the International Academy of Astronautics.

The Debris Mitigation Competition was established in 2016 with the aim to improve awareness of the long-term sustainability of space activities by providing an opportunity to present an idea of a post-mission disposal and active debris removal device. The first competition was held in Kamchia, Bulgaria on October 20, 2016 during the 4<sup>th</sup> UNISEC-Global Meeting, and the second competition was held in Sapienza University of Rome, Italy on December 4, 2017 during the 5<sup>th</sup> UNISEC-Global Meeting. I would say they are also related with Thematic Priority No. 7. I encourage young people around the world to be a part of solutions, not a part of problems, by handling this matter more effectively.

Madam Chair [Mr. Chairman] and distinguished delegates,

I would like to draw your attention to a role played by universities, especially in the non-space faring countries, one of the driving forces to develop their space activities.

It should be noted that the first satellites of some countries such as Mongolia, Ghana and Bangladesh were built and launched by their respective university students with the assistance of Kyushu Institute of Technology and JAXA. The first satellite of Kenya, beneficiary of the KiboCUBE program promoted by UNOOSA and JAXA, was built and handed over for launch to JAXA by team from University of Nairobi with the support from the Kenya Space Agency, Sapienza University of Rome and the Italian Space Agency (ASI). I would like to conclude my statement by emphasizing that UNISEC-Global will help to create a world where every country can access space and space technology regardless of its economic status.

The key principle of the 2030 Agenda for Sustainable Development is "No one will be left behind."

We would like to do our best to realize "*a world where university students can participate in practical space projects in ALL countries*" *in cooperation with many other organizations that share the same values.* 

Thank you for your kind attention.