Item 14: General exchange of views on the application of international law to small satellite activities

By. Mr. Adhimantara I.N.

Thank You Madam Chair,

In terms of outer space issue, Indonesia's geographical location is extremely unique. Indonesia is one of the largest archipelagic state which comprises over 17,000 islands stretching over 5,000 km from the East to West, and 1,700 km from North to South.

As an equatorial country, Indonesia lies on the Pacific "Ring of Fire", where volcanic eruptions, earthquakes, tsunamis, floods, landslides, drought, and forest fires frequently happen.

With at least 1.5 thousand natural disasters occurring every year, Indonesia becomes an archipelagic country with the highest natural disaster rates worldwide. We are prone to natural disasters. This special geographical condition makes Indonesia has an extremely huge interest to access and utilize space technology and applications.

Small satellites are indeed, needed.

Indonesia attaches to the importance of small satellites to access outer space by taking into account the space debris mitigation guidelines and long-term sustainability of outer space activities.

Allow me Chair, to explain our legal system regarding this matter.

The Government of the Republic of Indonesia enacted Presidential Regulation No. 45/2017 as a master plan of space activities and provided a mandate to develop a satellite development program, among others, and to enhance Earth observation application in Indonesia.

In that context, Indonesia has been conducting small satellites activities in accordance with international norms. Three of satellites are already in orbit with various benefits, including:

- LAPAN-A1: for carrying out direct monitoring of situations on Earth such as forest fires, volcanoes, floods, store and forward communication messages in Indonesian territory, as well as for mobile communication missions.
- LAPAN-A2: for Earth observation, especially disaster mitigation, ship monitoring and amateur radio communication. This LAPAN-A2 is the first Earth monitoring satellite in the world to have an equatorial orbit.
- LAPAN-A3: for monitoring the Earth, especially agriculture, monitoring global ocean traffic and measuring the Earth's magnetic field.

Furthermore, Indonesia will launch the LAPAN-A4 satellite, scheduled at the end of this year which, will be useful to be utilized for monitoring the earth, both natural

resources and environmental conditions, to do disaster analysis, maritime monitoring including monitoring of ships and fishing theft, as well as performing measurement of Earth magnetic field, and monitoring space weather.

In addition, Indonesia acknowledges the contribution of Japanese Experiment Module "Kibo" of the International Space Station (ISS) that is capable of deploying small satellites that can mitigate space debris from direct launches, and its role to enhance the capacity building of developing countries.

Madam Chair,

Regarding the mega-constellations trend, Indonesia takes note the impact to ground-based astronomy, Earth orbit, and Earth's upper atmosphere. Indonesia views the need to discuss some issues, including:

- To ensure the rational and equitable use of the low Earth orbit and frequency spectrum.
- To avoid operational interference and collision risks.
- To conduct International coordination and disclosure of information and data regarding of SSA activities.
- To facilitate Registration of mega constellation satellite. We take note that states may use a spreadsheet format as stated in the background paper provided by the secretariat in document A/AC.105/C.2/L.322. This also will allow us to identify whether a space object is part of a large constellation or mega constellation.

Thank You