

KAZUTO SUZUKI

Professor of Science and Technology Policy at the Graduate School of Public Policy at the University of Tokyo

Patrick Nicolet, Founder and Managing Partner of Linebreak Ltd., former Group Chief Technology Officer of Capgemini

That will not be an easy one and we will need some rules, and I think this is an area where Professor Suzuki has been active for many years. Can you please tell us where we are in the governance and where you see the path forward?

Kazuto Suzuki

First of all, thank you very much for inviting me for this World Policy Conference. This is the second time I am attending, and I am very happy that space is now on the agenda. I think we are now in the phase of space 2.0. Space 1.0 is the image of American astronauts with the Stars and Stripes on a patch, where everything was done by the big countries. Today, space 2.0 is all about the democratization and everyone is now a participant in space activities, including the UAE, and I think the UAE is now playing a very important role as a hub of international cooperation.

That increasing number of participants in space is one thing. The second is the commercialization, and we have a lot of commercial activities on this panel. There are a number of private funds and private actors involved now and these are different from the traditional actors in governance.

The third aspect is the militarization, with space now being used for military purposes and commercial services like Starlink also being used for military services. If you look at the case of the war in Ukraine, Ukraine does not own space assets, but they are using space extensively for military purposes and being very successful at that.

On the other hand, that is creating the fourth point, which is the vulnerability of these space assets. Because these commercial and government space assets are now being used to make a difference in the field of fighting wars, those space assets may be a very important point of attack to destroy the capabilities of space. That means that space is generally a vulnerable asset, there is no place to hide, the trajectories and orbits are easy to detect, and you can shoot down or jam the radio waves, or do a co-orbital – which means that the killer satellite is following another satellite. There are a lot of ways to disrupt the services from space.

In that sense, I think it is very important to have some sort of a rule of law for space today and to make sure we do have some sort of governance because space is very unique, there are

no borders or area denial, everything is moving. The only law defining space activities is the law of physics and nothing is working in a way that terrestrial rules can be applied. It is a different ball game, and we need to think of different or creative ways of understanding how to use space or how to govern space. That is particularly important as regards commercial assets because the extensive commercialization of space is now making it possible for everyone, including private actors, to use space for military purposes. For example, if you read the newspapers, they buy very sophisticated Earth observation images that are close to the sharpness of spy satellites, so everyone is now able to have almost the equivalent capabilities for monitoring and surveillance for reconnaissance of what is happening in Russia and Ukraine. These capabilities may blur the boundary between the public and the private actors.

Therefore, how do we govern this space with this increasing number of actors due to the democratization commercialization and the much more complex use of space for a variety of purposes? We cannot really apply the traditional international law where certain areas are defined by certain countries. What we need to do is to build up the norms to govern the global commons and there have been some attempts to do this. The European Union has engaged in activities to build up an international code of conduct, which unfortunately was unsuccessful. Russia and China are trying to build up a new treaty with legally binding rules to prevent the use of space for military purposes but, again, this has not been very successful. I think we now need to take a different approach, one of which is the open-ended working group conducted under the auspices of the United Nations General Assembly, which was initially a UK initiative, but Japan is also part of it. I think these norm building exercises are now very important, but it is gradually sharing the understanding that space is a global common, so that even the conflicting actors need to control space and control their behavior.

What is interesting in the case of the war in Ukraine is that even though Russia has the capability to disrupt and destroy the commercial and US satellites that provide services for Ukraine, Russia has not really done that. The first reason is that, with the new technology called constellations – like Starlink with 3,000 satellites – you cannot really shoot 3,000 satellites down at once. This new technology is creating a situation where shooting down or disrupting satellite services is no longer possible. The other thing is the deterrents: because a satellite belongs to certain countries, an attack against a satellite can therefore be claimed to be an act of war which means they can then exercise self-defense. If the Russians attacked an American satellite, then it would automatically create a situation where Russia is fighting the United States. This deterrent is another way of governing the international rules. Based on this new technology, the constellation and risk evasions, as well as deterrents, we can build up the norm discussions in the open-ended working group under the United Nations. I think this is the current ongoing effort of building an international governance of space.

Patrick Nicolet

Thank you, Professor Suzuki, for the picture.