

54TH IISL COLLOQUIUM ON THE LAW OF OUTER SPACE (E7)
Nandasiri Jasentuliyana Keynote Lecture on Space Law & 3rd Young Scholars Session (1)

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YOUTH INVOLVEMENT OF NEO WORKING PROJECT (SPACE GENERATION ADVISORY
COUNCIL) IN DISASTER RESPONSE FOCUSING ON HUMAN AND ENVIRONMENTAL
SECURITY.

Abstract

Human and Environmental security from space activities is one of the most current critical topics discussed globally. The threats we face such as climate change, pollution, water scarcity, etc are not lightly to be taken. Dealing with these emerging issues is very critical and should be focused primarily however there are issues not so different from these that also need a good amount of attention such as a Near Earth Objects threat. Along with the increase in the discovery of these objects, the threat they pose to the Earth has increased with it. The percentage of a NEO collision is same as the percentage of a person being hit by a bus. This fact makes this issue a very important one as from previous knowledge of collisions (example: Tunguska event), even a small asteroid can cause massive damage to humans as well as the environment. These damages are not constricted to a city or a small part of a country, some collisions have a potential to wipe an entire country off this planet or worse an entire civilization. Research is carried out regarding the issue of damages caused by these objects from previous event which will help create a strategy to help prevent such large damage. The initial strategy will depend on prediction of a collision by tracking and recording its movements. The prediction will also indicate a position of collision. With this information and timeframe of the collision, a pre-planned solution can be obtained. Along with strategy planning, the countries have a responsibility to evacuate and protect its citizens. This should be taken into consideration when taking decision regarding human damage and survival rates. Survival system for human and environment should be put in place to provide help on decisions during a small scaled asteroid or space debris collision. Constructed series of legal parameters in case of response and mitigation have been developed by the Association of Space Explorers but these parameters should be internationally accepted and establish with the Space Law Treaty. This research will develop a strategic plan with considering legal parameters from different previous collisions to help prevent and survive the next one. It will also look into a constructive way to approach the space agencies and industry to accept these strategies.