Exploration of Near-Earth Asteroids (4) Exploration of Near-Earth Asteroids (2) (2)

Author: Ms. Smiriti Srivastava Space Generation Advisory Council (SGAC), India, smiriti.srivastava@spacegeneration.org

Mr. Arjun Vijaykumar Space Generation Advisory Council (SGAC), India, mfd19i011@iiitdm.ac.in Ms. Pavithra pavithra_pathy Moon Village Association (MVA), Sweden, p.manghaipathy@gmail.com Mr. RAJ PANCHAL Space Generation Advisory Council (SGAC), India, raj.mpstme7@gmail.com Ms. Dhanisha Sateesh Space Generation Advisory Council (SGAC), India, dha.tulip@gmail.com Ms. Nandini Singh Space Generation Advisory Council (SGAC), India, singh.nandini12@gmail.com Mr. Ranjan Sharma Space Generation Advisory Council (SGAC), Nepal, sharmaranjan816@gmail.com

NEAR-EARTH OBJECTS (NEO) 2030; FORECASTING THE FUTURE OF NEO STUDIES AND YOUTH INVOLVEMENT FOR SUSTAINABLE DEVELOPMENT GOALS (SDGS)

Abstract

The Sustainable Development Goals (SDGs) developed the Space 2030 Agenda from the United Nations Office for Outer Space Affairs (UNOOSA) which provided the framework for a wide range of international space activities with varying objectives and collaboration strategies. The Space Generation Advisory Council's (SGAC) NEO 2030 Project focuses on addressing the role, impact and benefits of Near-Earth Objects (NEO) and related activities with regard to the 2030 SDGs. The paper focuses on two key NEO specific Space 2030 objectives; Firstly, how space accessibility and diplomacy from UNIS-PACE+50 translates to NEOs in terms of disaster risk reduction including intellectual property, liability, planetary defense, and peaceful partnerships for the protection of life on Earth. With a targeted focus on SDGs the paper aims to deliver a clear understanding of how NEO research and development paves way for overall sustainable growth by detailing an outline for planetary defense policy and research. Secondly, how to reduce the 'Space Divide' by investing in outreach measures, targeting youth and ensuring that all UNOOSA Member States have all necessary resources to join the commercial and planetary defense NEO programs to ensure enhanced global infrastructure, resilience, peace and justice through collaboration and planned sustainable development. This paper discusses the current SGAC NEO 2030 project and summarises key findings from the SGAC NEO Project Group's work, to provide the youth's perspective on insights into current trends, influences and policies affecting the development of the NEO research. Focusing on the issue of space accessibility and diplomacy, from the perspectives of NEOs will prove a deeper insight into potential solutions for planetary protection. The paper identifies clear measures and actors to take part in the NEO field to present a systematic approach to handle organization and implementation. Each element considers the current state and presents the various elements that must be considered in order to make a targeted plan for NEO 2030 Project Groups and subsequent collaboration units (international and local as well as public-private) to ensure a coherent and concise understanding of the implementation plan. The goal at hand is to provide the groundwork for a map that can guide the SDG community, specifically related to development in the Space sector, through various considerations and identify drawbacks in the system that might hinder progress with a focus on pushing for a more involved youth input.