X Key International and Political Developments

☐ Advancements and Progress in NEO Discovery
☐ NEO Characterization Results
☐ Deflection and Disruption Models & Testing
☐ Mission & Campaign Designs
☐ Impact Consequences
☐ Disaster Response
☐ Decision to Act
☐ Public Education & Communication

The United Nations And Planetary Defence: Key Developments Following UNISPACE+50 In 2018

Romana Kofler(1)

(1) United Nations Office for Outer Space Affairs, (UNOOSA), United Nations Office at Vienna, Vienna International Centre, P.O.Box 500, A-1400 Vienna, Austria; +43-699-1459-4962, romana.kofler@un.org

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ABSTRACT

Due to the potential global consequences of a near-Earth object (NEO) impact and the enormous amount of resources required for a mitigation mission to prevent a collision, the United Nations has been one of the main fora for the coordination of NEO mitigation efforts by a diversity of actors, including national and international space agencies and governments. The UN Member States, especially those with capabilities to engage in a possible planetary defence mission, already share several common interests in NEO threat identification and mitigation. The UN Office for Outer Space Affairs (UNOOSA) works with IAWN and SMPAG, to support their coordination efforts in mitigating a potential NEO threat.
This paper presents recent developments under the auspices of the United Nations following UNISPACE+50 in 2018, which, among others resulted in a decision by member States of the Committee on the Peaceful Uses of Outer Space (COPUOS) to develop a “Space2030” agenda and its implementation plan as a policy guidance document aimed to address new challenges and opportunities in the space arena at a time when more participants, representing both governmental agencies and non-governmental entities, including industry and the private sector, are increasingly becoming involved in ventures to explore and use space and to carry out space activities.

Although the work of the IAWN, SMPAG and UNOOSA in implementation of recommendations for an international response to the NEO impact threat is ongoing, and resulting from UNISPACE III conference, it also relates to the future “Space2030” agenda, which, among others, will address the use of space assets to build more resilient societies. Apart from natural disasters there are other areas where space systems are increasingly relied on to respond to the impact of events, such as adverse space weather and NEO impact threats. Enhanced coordination efforts at the global level to reduce the impact of such events are essential. The goal is to ensure that all countries, in particular developing nations with limited capacity for predicting and mitigating a NEO impact, are aware of potential threats as well as to guarantee effective emergency response and disaster management in the event of a NEO impact.

The paper will also present joint accomplishments by UNOOSA, IAWN and SMPAG, since the 2017 PDC, such as the recent UN publication entitled “Near-Earth objects and planetary defence” (ST/SPACE/73) and the joint article for Acta Astronautica to a special issue resulting from PDC 2017. It further aims to outline future work and challenges, such as getting timely information to the UN Member States in case of a credible threat and ways to reach to disaster and response communities worldwide to enhance their understanding and link them to IAWN and SMPAG activities as trusted sources of information by capitalizing on one of UNOOSA’s programme – the United Nations Platform for Space-based Information for Disaster Management and Emergency Response (UN-SPIDER) and its global network of regional support offices (RSOs).