

## Planetary Defense Conference 2021

- 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

Session: The Decision to Act: Political, Legal and Economic Aspects of Planetary Defense  
To consider for oral presentation.

### THE LEGAL ASPECTS OF PLANETARY DEFENSE: Conclusions of the SMPAG Ad-Hoc Legal Working Group Report <sup>(1)</sup>

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### ABSTRACT

The UN-mandated Space Mission Planning Advisory Group (SMPAG) was established in 2014 following a recommendation from the working group on Near-Earth Objects (NEOs) of the Scientific and Technical Subcommittee of the United Nations Committee on the Peaceful Uses of Outer Space. The main purpose of SMPAG is to “prepare for an international response to a threat by a near-Earth object through the exchange of information, development of options for collaborative research and mission opportunities, and to conduct NEO threat mitigation planning activities.”<sup>1</sup>

In 2016, SMPAG created an Ad-Hoc Legal Working Group (AHLWG) tasked to identify and answer legal questions and issues related to the field of planetary defense. Dr. Line Drube, planetary scientist, led the creation and the coordination of this group before the responsibility was passed on to me in November 2018. This group, still active today, is composed of fifteen international space lawyers. The AHLWG team completed its first report which was endorsed by SMPAG in February 2020. This presentation at PDC 2021 will examine the results of the 2020 SMPAG Ad-Hoc Legal Working Group “Planetary Defence Legal Overview and Assessment” report. This two-year research tackles questions asked by SMPAG members such as: could a nation be allowed to use a nuclear device in space to push away an asteroid? If nations were to detect an asteroid, would international law impose an obligation on States to inform other States about a potential NEO impact threat? If a planetary defense mission failed and a piece of the asteroid fell on Earth, would the state leading the mission be liable for damage caused by the object? The goal of this presentation at PDC 2021 will be to highlight the lessons learned from the 2020 Legal Overview of Planetary Defense report<sup>2</sup> and reflect on the key questions raised and answers provided in this study.

<sup>1</sup> Cf. SMPAG Terms of Reference: [https://www.cosmos.esa.int/web/smpag/terms\\_of\\_reference\\_v2](https://www.cosmos.esa.int/web/smpag/terms_of_reference_v2)

<sup>2</sup> Cf. [https://www.cosmos.esa.int/documents/336356/336472/SMPAG-RP-004\\_1\\_0\\_SMPAG\\_legal\\_report\\_2020-04-08.pdf](https://www.cosmos.esa.int/documents/336356/336472/SMPAG-RP-004_1_0_SMPAG_legal_report_2020-04-08.pdf)