

**PDC2017
Tokyo, Japan**

IAA-PDC-17-01-03

X Key International and Political Developments

THE SPACE MISSION PLANNING ADVISORY GROUP

G. Drolshagen^{1,2}

**on behalf of the SMPAG members: AEM, ASI, Belspo, CNES, DLR, IAWN, ISA, JAXA,
KASI, ESA, NASA, ROSA, ROSCOSMOS, SSAU, SUPARCO, UKSA
and SMPAG Observers: ASE, IAA, IAU, UNOOSA**

¹European Space Agency, SSA-NEO Segment

*²Space Environment Studies, Univ. Oldenburg,
Buergerbuschweg 185, 26127 Oldenburg, Germany
e-mail: gerhard.drolshagen@uni-oldenburg.de*

Keywords: *NEO mitigation, UN Advisory Group, NEO space mission, International coordination*

ABSTRACT

The establishment of the SMPAG was recommended by 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 (UN COPUOS) during its fiftieth session, held in February 2013, and formally endorsed by the Committee at its fifty-sixth session in June 2013 and by the sixty-eighth session of the General Assembly in December 2013.

The purpose of the SMPAG is to prepare for an international response to a NEO impact threat through the exchange of information, development of options for collaborative research and mission opportunities, and NEO threat mitigation planning activities. Four main areas are identified as scope of SMPAG which should be pursued in close coordination with the International Asteroid Warning Network (IAWN):

- 1) Recommend and define reference missions, technology roadmaps and collaborative research
- 2) Identify opportunities for international collaboration on research, technologies and techniques for space-based NEO mitigation, keep members informed about national activities and communicate its activities to the public including a yearly briefing to the STSC.
- 3) Identify for possible detailed review within appropriate forums any legal and policy issues (e.g., liabilities) that may arise in undertaking NEO mitigation actions.
- 4) In case of a credible threat, recommend viable concepts for a possible mitigation campaign and recommend operational responsibilities.

According to its Terms of Reference membership to SMPAG is open to all national space agencies or governmental or inter-governmental entities that coordinate and fund space activities and are capable of contributing to or carrying out a space-based NEO mitigation campaign. In addition observers can be invited to SMPAG meetings. At the beginning of 2017 SMPAG consists of 16 members and several official permanent observers. The UN Office of Outer Space Affairs (UNOOSA) acts as permanent secretary of SMPAG.

The SMPAG consists of a plenary group of delegates nominated by its Members, guided by a Steering Committee with a rotating Chair. Working Groups can be established by the Steering Committee as needed.

The main activities of SMPAG are defined in a workplan which is considered as a living document. At the beginning of 2017 eleven tasks have been identified in the workplan and first results have been produced.

In 2016 an Ad-Hoc Working Group on Legal Issues was established by SMPAG. The main purpose of this Group is to identify legal issues relevant for NEO mitigation and to recommend a way forward to address these issues.

This paper will present the status and first results of SMPAG.

Comments:

Proposed for session 1, alternative session: 8 (Decision to Act), Oral presentation