

**Space Mission Planning Advisory Group
(SMPAG)
Status Report**

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SMPAG formation and status

The SMPAG was officially established in February 2014

SMPAG Terms of References were finalized in June 2014

SMPAG has established a work plan in November 2015 which is a living document

2 SMPAG meetings took place in 2017:

- **Feb 2017 at STSC in Vienna**
- **Oct 2017 at CNES in Toulouse, France**

SMPAG Membership

(Status 31 Jan 2018)

Official members with nominated delegations:

AEM (Mexico)	JAXA (Japan)
ASI (Italy)	KASI (South Korea)
Belspo (Belgium)	NASA (USA)
CNES (France)	ROSA (Romania)
DLR (Germany)	ROSCOSMOS (Russian Federation)
FFG (Austria)	
ESA	SSAU (Ukraine)
IAWN (ex officio)	SUPARCO (Pakistan)
ISA (Israel)	UKSA (UK)

Permanent Observers: ASE, IAA, IAU, UNOOSA, ESO

Application for membership:

-- received from **CNSA (China National Space Administration)**

-- intention indicated by: -- CSA (Canada), Czech Republic

SMPAG work plan

A list of 11 activities has been identified by SMPAG:

- **5.1: Criteria and thresholds for impact threat response actions. (Lead: NASA)**
- **5.2: Mitigation Mission Types and technologies to be considered (Lead: UKSA)**
- **5.3: Mapping of threat scenarios to mission types (Lead: ESA)**
- **5.4: Reference missions for different NEO threat scenarios (Lead: ASI)**
- **5.5: A plan for SMPAG action in case of a credible threat (Lead: NASA/IAA)**

SMPAG work plan, cont.

- **5.6: Communication guidelines in case of a credible threat (Lead: NASA)**
- **5.7: Roadmap for future work on planetary defense (Lead: DLR)**
- **5.8: Consequences, including failure, of NEO mitigation space missions (Lead: ESA)**
- **5.9: Criteria for deflection targeting (Lead: ROSA)**
- **5.10: Study the nuclear device option (Lead TBD)**
- **5.11: Toolbox for a characterization payload (Lead: CNES)**

SMPAG work status

- **Results on ongoing work plan activities have been delivered by**
 - **NASA (5.1 proposed threshold criteria). The proposed thresholds have been agreed by SMPAG.**
 - **DLR (5.7 first version of living road map)**
 - **CNES (5.11 toolbox for NEO characterization, existing relevant report as first part)**
 - **Several splinter meetings have been held during the 9th meeting to progress the work**

SMPAG work status

- **An ad-hoc working group on legal issues (SMPAG Legal WG) was officially established during the 7th SMPAG meeting in Oct 2016.**
- **The ToR of the Legal WG were approved by SMPAG at the 9th meeting in Oct 2017.**
- **The last personal meeting of the Legal WG took place on 30 Jan 2018. A first report is under preparation.**
- **A letter was send to the Director of OOSA suggesting additional steps to increase the visibility of the work by SMPAG (and IAWN). i.e.**
 - **Produce a UN Brochure on NEOs and Planetary Defense and rename the STSC session on NEOs to ´Near-Earth objects and Planetary Defense´**
 - **Work together with UNOOSA and UN-SPIDER**
 - **Proceed to defining and approach for interaction with OOSA and COPUS in case of a real event**