

SMPAG status

D. Koschny, SMPAG chair

Oct 2023







































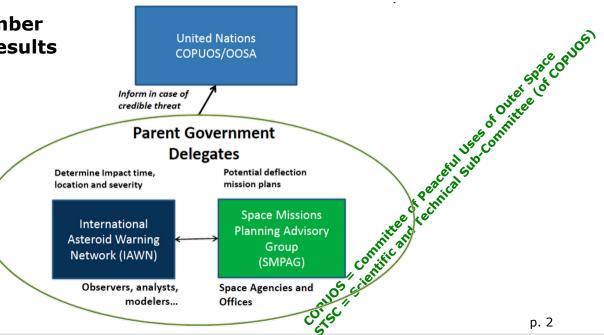


Reminder - context



European Space Agency

- □ 'Action Team 14' (AT14) created after the Unispace 99 conference task: Define how we should deal with the asteroid impact threat
- 2008 2013: Definition phase meetings in the margin of UN COPUOS STSC and UN COPUOS meetings
- NEO Working Group' of Member States discussed the AT14 results and produced a final recommendation
- The conclusion:
 - presented Feb 2014
 - adopted Oct 2014 by the General Assy



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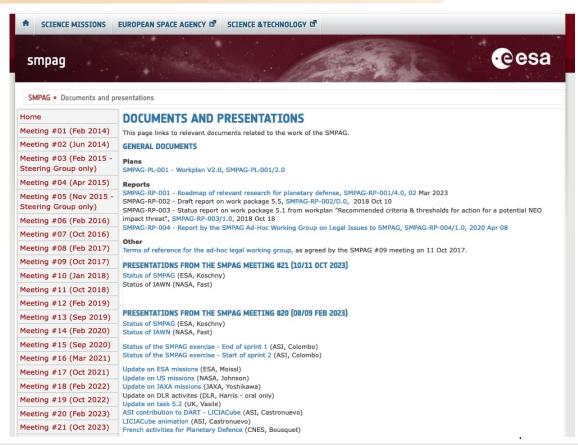


Current status - 1



All documents and minutes are available via the web page:

https://www.smpag.net.



































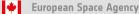














Current status - 2



- 18 member delegations (see https://www.smpag.net/smpag_members)
 - Welcome to N. Schmidt as official delegate from CZ
- 7 observers
 - European Astronomical Society (eas-astro.org) had requested ad-hoc observer status for this meeting – represented by Rudi Schmidt
- 1 ex-officio member (IAWN)
- A few 'in the pipeline' see separate agenda item today
- SMPAG hypothetical asteroid impact exercise still ongoing
 - Prepared and coordinated by the Italian Space Agency ASI
 - Three 'sprints' first one done, see report this meeting
- □ Planetary Defense Conference 2023 how would SMPAG react to the presented simulated asteroid threat scenario? was well received.

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smpaqPlease mail me (<u>Detlef.Koschny@tum.de</u>) and Romana.Kofler@un.org your presentations for publication on our web page.

SMPAG » Documents and presentations

Home

Meeting #01 (Feb 2014)

Meeting #02 (Jun 2014)

Meeting #03 (Feb 2015 -Steering Group only)

Meeting #04 (Apr 2015)

Meeting #05 (Nov 2015 -

Steering Group only)

Meeting #06 (Feb 2016)

Meeting #07 (Oct 2016)

Meeting #08 (Feb 2017)

Meeting #09 (Oct 2017)

Meeting #10 (Jan 2018)

Meeting #11 (Oct 2018) Meeting #12 (Feb 2019)

Meeting #13 (Sep 2019)

Meeting #14 (Feb 2020) Mosting #1E (Con 2020)

DOCUMENTS AND PRESENTATIONS

This page links to relevant documents related to the work of the SMPAG.

GENERAL DOCUMENTS

Plans

SMPAG-PL-001 - Workplan V2.0, SMPAG-PL-001/2.0

Reports

SMPAG-RP-001 - Roadmap of relevant research for planetary defense, SMPAG-RP-001/3.0, 15 Apr 2020 SMPAG-RP-002 - Draft report on work package 5.5, SMPAG-RP-002/D.0, 2018 Oct 10 SMPAG-RP-003 - Status report on work package 5.1 from workplan "Recommended criteria & thresholds for action for a spential NEO

impact threat", SMPAG-RP-003/1.0, 2018 Oct 18 SMPAG-RP-004 - Report by the SMPAG Ad-Hoc Working Group on Legal Issues to SMPAG, SMPAG-RP-004/1.0, 2020 A 208

Other

Terms of reference for the ad-hoc legal working group, as agreed by the SMPAG #09 meeting on 11 Oct 2017.

PRESENTATIONS FROM THE SMPAG MEETING #18 (09/10 FEB 2022)

Status of SMPAG (ESA, Koschny) Status of IAWN (NASA, Fast)

Update on Japanese missions (JAXA, Yoshikawa)

Update on US missions (NASA, Johnson) Update on Hera mission (ESA)

NEA-related activities in Germany (DLR, Harris) - see SMPAG #17 presentation slides.

NEA-related activities in Italy (ASI, Gabrielli)

Intelligent decision support system (UK, Vasile)





Appendix

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Current status - 3



- Workplan items (discussion to combine some is pending)
 - Criteria and thresholds for impact threat response actions (done)
 - Mitigation mission types and technologies to be considered (work ongoing)
 - Mapping of threat scenarios to mission types (work ongoing)
 - Reference missions for different NEO threat scenarios (work ongoing)
 - A plan for SMPAG action in case of a credible threat (work ongoing)
 - Communication guidelines in case of a credible threat
 - Produce a 'road map' for future work on planetary defence (working doc available)
 - Consequences, including failure, of NEO mitigation space missions (work ongoing)
 - Criteria for deflection targeting (work ongoing)
 - Study of the nuclear device option
 - Toolbox for a characterisation payload (working doc available)