PLANETARY PROTECTION OF OUTER SOLAR SYSTEM

The PPOSS project (Planetary Protection of Outer Solar System) is an initiative supported by the European Commission under the Horizon 2020 programme. PPOSS focuses on planetary protection of outer solar bodies, in particular icy moons, and tackles scientific, technological and policy-making challenges raised by this topic. This intensive three year programme will provide an international platform and forum where science, industry and policy actors will meet to nurture and catalyse discussions, exchange of knowledge and produce policy recommendations on the matter of planetary protection. Space exploration missions are international endeavours and planetary protection is by nature an issue of global relevance. Thus, the PPOSS project will promote international cooperation bringing partners and observers from non-European countries.

The main objectives of the PPOSS project are:

- describe the state of the art and good practice for implementing planetary protection requirements, and identify good practices and lessons to be learnt.
- identify scientific challenges, scientific requirements and knowledge gaps related to planetary protection of outer solar systems bodies, including small solar system bodies.
- develop an European engineering roadmap for the industry sector.
- review of the international outer solar system planetary protection regulation structure and categorisation, suggest improvements.
- facilitate the dissemination of knowledge related to planetary protection.

Overall, PPOSS will provide a platform to gain and diffuse knowledge on planetary protection of Outer Solar System bodies, it will represent a dedicated forum that will allow European scientists to meet and network with the most relevant international experts in the fields covered by PPOSS.

AUTHORS

- 1 Walter, Nicolas
- 1 Cabezas, Patricia
- 2 Rettberg, Petra
- 3 Fellous, Jean-Louis
- 4 Tortora, Jean-Jacques
- 5 Brucato, John Roberto
- 6 McKenna-Lawlor, Susan
- 7 Septhon, Mark
- 8 Kminek, Gerhard
- 9 Michel Viso

AFFILIATION OF OTHER AUTHORS:

- 1- EUROPEAN SCIENCE FOUNDATION (ESF), France
- 2- DEUTSCHES ZENTRUM FUER LUFT UND RAUMFAHRT EV (DLR), Germany
- 3- COMMITTEE ON SPACE RESEARCH (COSPAR), France
- 4- EUROSPACE, France
- 5- ISTITUTO NAZIONALE DI ASTROFISICA (INAF), Italy
- 6- Space Technology Ireland Ltd. (STIL), Ireland
- 7- IMPERIAL COLLEGE OF SCIENCE TECHNOLOGY AND MEDICINE, United Kingdom

- 8- EUROPEAN SPACE AGENCY (ESA)
- 9- CENTRE NATIONAL D'ETUDES SPATIALES (CNES)