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CONSIDERING PLANETARY PROTECTION OF OUTER SPACE BODIES - THE EUROPEAN
PPOSS PROJECT

Abstract

The PPOSS (Planetary Protection of Outer Solar System bodies) project, coordinated by the European Science Foundation is supported by the European Commission Horizon 2020 programme. This project kicked-off in January 2016 and will last for three years.

The PPOSS project intends to consider how planetary protection policy has been developed and is being implemented, it will look at case studies, lessons learnt and good practices in order to produce a Planetary Protection handbook that will be widely disseminated.

The project will also look forward and address the complex issues of organic and biological contamination of outer solar system bodies, in particular small bodies and moons of gas giant planets. PPOSS will identify knowledge gaps, propose scientific goals and suggest activities to overcome the main hurdles to reach these goals.

Besides scientific issues, PPOSS will consider the European engineering landscape and the capacity of the European industry to meet the challenges raised by planetary protection of outer solar system bodies, an engineering roadmap will result from this effort.

As a one of the main outcomes, the PPOSS project will eventually review the international planetary protection regulation structure, process and categorization related to outer solar system bodies, it will suggest policy improvements to COSPAR Panel on Planetary Protection.

PPOSS is implemented by a consortium of seven European and international organisations (European Science Foundation, DLR, COSPAR, Eurospace, INAF, Space Technology Ireland, Imperial College) as well as by international partners, including the Chinese Academy of Sciences and China Academy of Space Technology. The project intends to broaden its international footprint and allow a dedicated forum to address the scientific, technical and policy challenges raised by planetary protection of outer solar system bodies.