

Exomars planetary protection implementation

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ExoMars will be Europe's first Rover mission to the Red Planet. The major aim of ExoMars is the search for evidence of extant or extinct life and, as such, demands the highest level of Planetary Protection (PP) requirements. This presentation will give the latest status of the PP implementation for this Category IVc mission. Areas that will be described include:

- PP strategy for all mission elements (Carrier, Descent Module, Rover and Payloads)
- Organic contamination control
- Bioburden management
- Non-nominal impact provisions
- AIV options and baseline strategy
- Supplier and subcontractor management.

One of the major activities is the definition of the AIV approach for ExoMars. This definition relies heavily on the confident identification of the sterilization vulnerabilities of all hardware and equipment. A robust managerial and technical approach is necessary to ensure reliable sterilization compliance information is obtained.

A suitable approach is also necessary to ensure that no organic contamination will compromise ExoMars scientific results. This will require an aseptic build for at least part of the ExoMars assembly and detailed design solutions.

The presentation of the activities described in this abstract is subject to award of contract by the European Space Agency.