



PRoViScout - Planetary Robotics Vision Scout

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D5.1.2 PROVIM SW Overlay & Basic Components

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Work package 5 – PROVIM

Lead contractor for this deliverable SSL

Dissemination level: Confidential, only for members of the consortium (including the Commission Services)

EXECUTIVE SUMMARY

Three primary components have been developed for the PRoViScout concept namely:

1. Overseer – Off-board planning, monitoring and control
2. Vision and Rendering
3. Web Backend

Taken together the three components provide a rich and novel way of supporting an autonomous exploration platform. This document focuses primarily on the Overseer planning, monitoring and control element which allows operators to generate and construct a plan which will provide a high-level reference point for the on-board PROVISC components.

A key feature of this system is the ability for scientists and operators to dictate how the system should respond to serendipitous science events at a high-level. This is achieved by allowing users to specify what actions to take should a particular science event occur. The detailed specifics of the actions are however determined autonomously by the on-board system at planning time.

An interesting outcome of this work is its generic applicability to a range of autonomous or automated mobile platforms. The toolset specified here could be used to support various ground based or even underwater vehicles.

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