

The Earth Views Project: An Outreach and Education Proposal for SMART-1

Van Dijk, S.; Ockels, W.J.**; Eckart, P.****

** Faculty of Aerospace Engineering, Technical University of Delft, The Netherlands*

*** ESA Office for Educational Projects Outreach Activities (ADM/RE), The Netherlands*

**** Division of Astronautics, Technische Universität München, Germany*

This paper presents the EarthViews project which is proposed as an additional Public Outreach and Education project for the SMART-1 mission.

Over the last decade, the continuous development of the Internet has revolutionized the means by which space agencies are able to communicate their activities to the public at large. With the ability to provide a continuous and up to date coverage of individual space missions, the communication strategies are shifting towards a direct involvement of the public in the practice of space exploration (e.g. Mars Pathfinder).

The goal of the EarthViews project is to further intensify this involvement by offering a complete coverage of a spacecraft's journey to its targeted destination. Where the use of visual information (images) has proven to be the most effective means of communicating space to the general public, this coverage will comprise of images of the receding Earth taken with an onboard camera. These images are then to be distributed on the Internet in Near Real Time.

A feasibility study for this project has been conducted as part of the planned Public Outreach and Education activities for the LunarSat mission to the Moon. It was performed in co-operation with the Technical University of Delft during the ESA-financed Phase B for the LunarSat mission. Showing the project to be principally feasible, it provides a good starting point for the further development of the project and its associated outreach and education activities.

With ESA's decision to discontinue support for the LunarSat mission, an alternative for the continuation of the project is found with the SMART-1 mission which also heads out to the Moon and also includes an optical camera as mission payload. The EarthViews project can be relatively easily adapted to the difference in mission design between the SMART-1 mission and the LunarSat mission, where the most notable change is the considerably longer transfer time of 17 months instead of 3-4 months.

Overall, it is believed that the incorporation of EarthViews in the SMART-1 Public Outreach and Education strategy can contribute to a wider appreciation of Europe's role in space.