

EUROPEAN SPACE EXPLORATION PROGRAMME AURORA

CALL TO ACADEMIA FOR INNOVATIVE CONCEPTS AND TECHNOLOGIES FOR LUNAR EXPLORATION

The European Space Agency is currently in the process of defining a long-term European strategy for space exploration.

As part of this activity, Alcatel Alenia Space Italia (AAS-I) is leading a study with the objective of identifying potential European contributions to the exploration of the Moon, taking the international context into account.

Within this framework and in line with the Aurora programme, the Agency asked AAS-I to issue a "Call for Innovative Concepts and Technologies" addressed to Academic Institutions.

The aim of the Call is to look for innovative concepts and technologies, for instance in fields like in-situ resource utilization (ISRU), nuclear propulsion, habitation, nano-technology, modular architecture, and many other fields, which are relevant for Europe and which could lead to the development of new approaches and technologies for space exploration.

This is an interesting opportunity for the academic institutions to communicate their own vision and ideas for a European space exploration programme and to present their potential contributions.

Interested Academic Institutions shall submit their proposals by **October 21, 2005**, using a dedicated form that will be made available to them.

Via this form shall be addressed, among others, the following points:

- Description and current status of the innovative concept / technology;
- Proposed further study workplan not exceeding three months, to be performed in the frame of the AAS-I study;
- Outlook on the future development of the proposed innovative concept / technology;
- Relevant applications for space exploration;
- Assessment of innovation potential (for space exploration, for other space sectors and non-space sectors).

The submitted ideas will be screened by the Agency and AAS-I, and will be taken into account in the whole process of defining European contributions to space exploration.

For some selected ideas ESA and AAS-I will offer a grant of ~10 k€ to support the implementation of a three-month study with the objectives of:

- Improving and consolidating the technical and programmatic information provided in the frame of the Call;
- Supporting the assessment of the impacts (technical / programmatic) induced by the proposed innovative ideas on ESA / AAS-I selected exploration scenarios.

The selection will be based on the innovation potential of the idea in general, but also for lunar exploration in particular, as well as on the quality of the proposed study workplan.

The academic studies will conclude with a Final Presentation at ESTEC involving ESA, AAS-I, and chosen Academia. Indeed, a few academic institutions, which answered the Call but were not initially selected, will also be invited to participate. All the other proposing universities are welcome to attend the meeting if they wish.

Academic Institutions interested in answering this Call shall write to:

lunar.exploration@aleniaspazio.it

to request the dedicated form to be filled. Any further information can be obtained at the same e-mail address.