Geophysical Research Abstracts,
Vol. 11, EGU2009-5240, 2009
EGU General Assembly 2009

Collaboration support system for “Phobos-Soil” space mission.

V. Nazarov, R. Nazirov, and A. Zakharov
Space Research Institute, Academy of Science, Moscow, Russian Federation (vnazarov@romance.iki.rssi.ru)

Rapid development of communication facilities leads growth of interactions done via electronic means. However we can see some paradox in this segment in last times: Extending of communication facilities increases collaboration chaos. And it is very sensitive for space missions in general and scientific space mission particularly because effective decision of this task provides successful realization of the missions and promises increasing the ratio of functional characteristic and cost of mission at all.

Resolving of this problem may be found by using respective modern technologies and methods which widely used in different branches and not in the space researches only. Such approaches as Social Networking, Web 2.0 and Enterprise 2.0 look most prospective in this context.

The primary goal of the “Phobos-Soil” mission is an investigation of the Phobos which is the Martian moon and particularly its regolith, internal structure, peculiarities of the orbital and proper motion, as well as a number of different scientific measurements and experiments for investigation of the Martian environment. A lot of investigators involved in the mission. Effective collaboration system is key facility for information support of the mission therefore.

Further to main goal: communication between users of the system, modern approaches allows using such capabilities as self-organizing community, user generated content, centralized and federative control of the system. Also it may have one unique possibility - knowledge management which is very important for space mission realization.

Therefore collaboration support system for “Phobos-Soil” mission designed on the base of multilayer model which includes such levels as Communications, Announcement and Information, Data sharing and Knowledge management.

The collaboration support system for “Phobos-Soil” mission will be used as prototype for prospective Russian scientific space missions and the presentation describes its architecture, methodological and technical aspects of its design.