

REPORT FROM ILEWG ON SCIENCE AND EXPLORATION QUESTIONS. B.H. Foing and International Lunar Exploration Working Group (ILEWG), *ILEWG c/o ESTEC/SRE-S, postbus 299, 2200 AG Noordwijk, NL, Europe, (Bernard.Foing@esa.int) <http://sci.esa.int/ilewg>*

Abstract: We shall report, with focus on science and exploration questions, on the ILEWG charter, goals and activities, on ICEUM "lunar declarations" and follow-up activities.

ILEWG charter: ILEWG, the International Lunar Exploration Working Group is a public forum created in 1994, sponsored by the world's space agencies to support "international cooperation towards a world strategy for the exploration and utilization of the Moon - our natural satellite". The charter of ILEWG is:

- To develop an international strategy for the exploration of the Moon
- To establish a forum and mechanisms for the communication and coordination of activities
- To implement international coordination and cooperation
- In order to facilitate communication among all interested parties ILEWG agrees to establish an electronic communication network for exchange of science, technology and programmatic information related to lunar activities

ILEWG meets regularly, at least, once a year, and leads the organization of an International Conference in order to discuss the state of lunar exploration.

Formal reports are given at COSPAR meetings and to space agencies.

ILEWG is sponsored by the world's space agencies and is intended to serve three relevant groups:

- actual members of the ILEWG, ie delegates and representatives of the participating Space Agencies and organizations - allowing them to discuss and possibly harmonize their draft concepts and plans
- team members of the relevant space projects - allowing them to coordinate their internal work according to the guidelines provided by the Charter of the ILEWG
- members of the general public and of the Lunar Explorer's Society who are interested and wish to be informed on the progress of the Moon projects and possibly contribute their own ideas

ILEWG activities and working groups: ILEWG task groups include science, technology, human aspects, socio-economics, young explorers and outreach, programmatics, roadmaps and synergies with Mars exploration. Users can obtain information on how to participate, as well as details on the latest news and events regarding lunar exploration, forthcoming meetings, relevant reports and documents of importance for the work of the ILEWG, summary descriptions of cur-

rent lunar exploration projects (such as SMART-1, Chang'E1, Selene, Chandrayaan-1, LRO, LCROSS) funded by various space agencies, and basic data on the Moon itself. Activities of the related space agencies and organizations can also be found.

ILEWG has been organising International Conferences on Exploration and Utilisation of the Moon (ICEUM) since 1994, whose proceedings are published. It has also sponsored a number of activities, workshops, tasks groups and publications in collaborations with other organisations: COSPAR, space agencies, IAA, IAF, EGU (see references below). In accordance with its charter, ILEWG reports to COSPAR, and a summary was given at Montreal COSPAR2008 on ILEWG activities conducted since the previous COSPAR2006 assembly in Beijing. The recent ILEWG International Conference on Exploration and Utilisation of the Moon, were held respectively in Udaipur, India (ICEUM6, 2004), in Toronto, Canada (ICEUM7, 2005), in Beijing (ICEUM8, 2006) and Sorrento (ICEUM9, 2007).

References: [1] 1st International Lunar Workshop, Balsiger H. et al., Editors, European Space Agency, 1994. ESA-SP-1170. [2] 2nd International Lunar Workshop, Kyoto, H. Mizutani, editor, Japan Space Forum Publisher, 1997. [3] 3rd International Lunar Workshop, Moscow 1998, E. Galimov, editor. [4] ICEUM4, ESTEC, 2000, ESA SP-462, B.H. Foing & M. Perry, editors. [5] ICEUM5, Hawaii Nov 2003, Durst S.M. et al, Editors, Vol 108, 1-576 pp, Science and Technology Series, American Astronautical Society, 2004. [6] ICEUM6, Udaipur 2004, Bhandari N., Editor, Journal Earth System Science, India, 114, No6, Dec 2005, pp. 573-841. [7] ICEUM7, Toronto Sept 2005, sci.esa.int/ilewg. [8] ICEUM8, Beijing July 2006, Journal of Chinese Society of Astronautics, Vol. 28 Sup., 2007, Ji W., Editor. [9] ICEUM9, Sorrento, Italy, Foing B., Espinasse S., Kosters G., Editors. <http://sci.esa.int/iceum9>, Dec. 2007). [11] Ehrenfreund, P., Foing, B.H., Cellino, A. Editors, The Moon and Near Earth Objects, ASR Vol 37, 1, 2006. [12] Foing, B.H. et al editors, 'Astronomy and Space Science from the Moon', ASR 14, 6, 1994. [13] Foing, B.H. et al, editor, Lunar Exploration, Planetary and Space Science, Vol 50, 14-15, 2002. [14] Foing, B.H., Heather, D. editors, 'Lunar Exploration 2000', ASR Vol 30, Nr 8, 2002. [15] Huntress, W. et al 'The next steps in exploring deep space - A cosmic study by the IAA', Acta Astronautica, Vol 58, Issues 6-7, 2006, p302-377. [16] Ip W.-H., Foing, B.H., Masson Ph.L., editors, The Moon and Mars, ASR Vol 23, 11, 1999.