UNITED NATIONS OFFICE AT VIENNA OFFICE DES NATIONS UNIES A VIENNE

# **INFORMATION NOTE**

# United Nations/Malaysia Expert Meeting on Human Space Technology

Hosted by the Institute of Space Science (ANGKASA), National University of Malaysia

Putrajaya, Malaysia, 14-18 November 2011

#### 1. Backgrounds

The United Nations Office for Outer Space Affairs (UNOOSA), under the framework of the United Nations Programme on Space Applications, has launched the Human Space Technology Initiative (HSTI) with the objective to promote international cooperation in human spaceflight and space exploration-related activities.

The International Space Station (ISS) is the largest development ever attempted in space. Fully operational with a permanent crew of six (6), the ISS is an unprecedented facility for science and technology research (material science and life science), astronomy, Earth observation, and educational outreach. The microgravity environment of the ISS provides a unique opportunity to deepen the understanding of space science and technology as well as space medicine. As a unique symbol of international collaboration, the ISS could be regarded as one of the greatest resources for humankind to explore space.

HSTI will aim to create awareness among United Nations Member States on the benefits of utilizing human space technology and its applications in contributing to international cooperation in the peaceful uses of outer space. This initiative builds on the relevant recommendations related to human spaceflight and exploration contained in the report of the Third United Nations Conference on the Peaceful Uses of Outer Space (UNISPACE III) held in July 1999.

The Outreach Seminar on the International Space Station was held in Vienna, Austria, on 8 February 2011. Seventeen Member States participated in the seminar along with the ISS partners: the Canadian Space Agency (CSA), the European Space Agency (ESA), the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) and the Japan Aerospace Exploration Agency (JAXA), the National Aeronautics and Space Administration (NASA) of the United States of America, and the Russian Federal Space Agency (Roscosmos). This seminar established that HSTI could be a meaningful mechanism for creating awareness about the potential of the ISS and the research conducted on the ISS among countries, regions, and potential users that have up to this point not been involved with such activities, thereby contributing to capacity building in microgravity science and technology education.

The first Expert Meeting on Human Space Technology will be held in Putrajaya, Malaysia, from 14 to 18 November 2011. The purpose of this Expert Meeting is to exchange information about the ISS among the ISS partners and potential ISS users outside the ISS partner nations as well as to discuss future activities to promote human space technology and its applications.

## 2. Objectives

HSTI will provide information to United Nations Member States about the ISS, its management structure, research facilities, utilization activities, and opportunities to cooperate with the ISS partners; the use of the ISS for educational outreach programmes; and examples of past cooperation activities. HSTI will also provide information about opportunities to build indigenous capacity in microgravity science education and research.

It is expected that this will lead to a greater understanding of the potential of the ISS and the research currently being conducted on the ISS among United Nations Member States. Non-ISS partners will be in a better position to assess opportunities for collaborative research which could eventually lead to a larger number of countries benefiting from human spaceflight activities.

With its unique microgravity environment, the ISS is an ideal platform for engaging students by increasing their excitement and interest in space, science, and technology in general. HSTI will emphasize the importance of the ISS as an educational platform and will also aim to increase education, outreach, and capacity building activities in developing countries.

#### **3. Preliminary Programme**

During the Expert Meeting, both plenary and parallel sessions are expected, and additional working group sessions will be held to review achievements in human space technology to date and to discuss future activities in human space technology. The sessions will start with a number of tutorial lectures to introduce the broad scope of human space activities conducted on various human space missions including the ISS.

The Expert Meeting will be structured around the following topics:

- Human space missions past and future
- ISS utilization programme pursued by CSA, ESA, MEXT/JAXA, NASA, and Roscosmos, and non-Partner utilization by Malaysia and other countries
- Research activities in microgravity science and technology
- Educational activities in microgravity science and technology
- ISS Non-Partner Participation Policy
- How to facilitate HSTI
- Working group meetings to further discuss the above topics

#### 4. Expected Participants

The Expert Meeting is being planned for participants from various professions including policymakers, decision makers, and senior experts from the following groups: international, regional, and national institutions, governmental institutions, research and academic institutions, multi-lateral and bi-lateral development agencies, non-governmental organizations, and industry.

## **5.** Participants Requirements

Participants should be in senior managerial or decision-making positions at governmental agencies, universities, national and regional institutions, non-governmental organizations, or industry and be able to work on HSTI activities in their countries.

#### 6. Language of the Expert Meeting and Presentation by Participants

The working language of the Expert Meeting will be English. Selected participants who are funded by the co-sponsors of the Expert Meeting will be required to prepare a presentation of approximately 10 to 20 minutes on topics relevant to the Expert Meeting objectives and the programme. Presentations on actual on-going projects will be of particular interest to participants of the Expert Meeting.

#### 7. Dates and Location of the Expert Meeting

The Expert Meeting will be held in Putrajaya, Malaysia, 14-18 November 2011. All selected and invited participants will receive an information packet with details on room and board and other local arrangements.

#### 8. Financial Support

Within the limited financial resources available, a number of selected participants will be offered financial support to attend the Expert Meeting. This financial support will defray the cost of travel (a round trip ticket – the most economic fare – between the airport of international departure in the home country and Putrajaya, Malaysia) and/or room and board expenses during the duration of the Expert Meeting. Funded participants will receive detailed information upon notification of their selection.

#### 9. Deadline for Submission of Applications

The completed application form, properly endorsed by the applicant's government/institution, should be mailed to:

Office for Outer Space Affairs United Nations Office at Vienna Vienna International Centre P.O. BOX 500 A-1400 Vienna, AUSTRIA Fax: (+43-1) 26060-5830 E-mail: unpsa@unoosa.org

and should reach the Office no later than 15 September 2011.

To accelerate processing of the application, <u>the applicant should also email it to</u> <u>unpsa@unoosa.org or fax an advanced copy</u> directly to the Office for Outer Space Affairs, United Nations Office at Vienna, <u>fax: (+43-1) 26060-5830</u>. Only complete applications, with all the requested information and signatures, will be considered.

Online application for the Expert Meeting is also available. We encourage all candidates to apply for the Expert Meeting online, as it helps to streamline the processing of applications. The online application form can be accessed at:

http://www.oosa.unvienna.org/oosa/en/SAP/act2011/Malaysia/index.html

#### **10. Life and Health Insurance**

Life/major health insurance for each of the selected participants is necessary and is the responsibility of the candidate or his/her institution or Government. The co-sponsors will not assume any responsibility for life and major health insurance, nor for expenses related to medical treatment or accidents.

#### **11. Points of Contact**

For information regarding the programme of the Expert Meeting, please contact **Ms. Mika OCHIAI**, United Nations Office for Outer Space Affairs.

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For information regarding the submission of nominations for attendance and funding, please contact **Ms. Ayoni OYENEYIN**, United Nations Office for Outer Space Affairs.

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The focal point for Malaysia:

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#### **12. Additional Information**

Updated information on HSTI and the Expert Meeting is available at:

http://www.oosa.unvienna.org/oosa/en/SAP/hsti/index.html