

# **INFORMATION NOTE**

# United Nations/Russian Federation Workshop on Human Capacity-Building in Space Science and Technology for Sustainable Social and Economic Development

Samara, Russian Federation 30 October - 2 November 2017

Co-organized by the United Nations Office for Outer Space Affairs and Samara National Research University

Co-sponsored by the European Space Agency (ESA)

#### 1. Introduction

The United Nations Office for Outer Space Affairs (UNOOSA) has the mandate to promote international space cooperation and to assist Members States with capacity-building in the use of space science, technology and its applications. For this purpose, the Programme on Space Applications, implemented by UNOOSA, was established in 1971. Since its inception, the Programme has made substantial progress in furthering knowledge and experience of space applications around the world, through the organization of dedicated workshops and establishments of fellowships.

In 2016, the General Assembly of the United Nations in its resolution A/RES/71/90, para.17 further emphasized the central role of UNOOSA in fostering capacity-building in the use of space science, technology and its applications and in providing assistance to developing countries, at their request, in the development of national space policy and legislation in conformity with international space law, as well as in the strengthening of institutional capacity in space activities.

In this context, the United Nations and the Government of the Russian Federation are organizing the United Nations/Russian Federation Workshop on Human Capacity-Building in Space Science and Technology for Sustainable Social and Economic Development, under the framework of the United Nations Programme on Space Applications. The Workshop is co-sponsored by the European Space Agency (ESA) and will be held in Samara, Russian Federation, from 30 October to 2 November 2017. It will bring together experts from the space sector, as well as decision makers, educators and researchers to discuss the most recent strategies for capacity-building in space science and technology. The Workshop is part of the preparatory activities and plan of work of the UNISPACE+50 event to be held in 2018.

The hosting organization, Samara National Research University (SNRU) (former Samara State Aerospace University (SSAU)), is one of the largest Russian academic institutions offering educational programmes in aerospace engineering and related fields. Hosting support will also be provided by the JSC Rocket Space Center "Progress" with participation of the Government of the Samara region.

### 2. Workshop Objectives

The Workshop will address the role of human capacity-building in the domains of space science, technology and its applications in support of sustainable development, with a particular focus on developing and emerging countries.

The objectives of this Workshop are to:

- 1. Examine the opportunities for development of human potential in relation to UNISPACE+50 Thematic Priority 7 (TP7) "Capacity-building for the 21<sup>st</sup> Century" and the Sustainable Development Goal (SDG 4) on "Quality Education".
- 2. Review the status of global, regional and national capacity-building efforts in space science, technology and its applications.
- 3. Promote the implementation and coordination of international cooperation programmes in space-related fields that promote sustainable development, in line with the 2030 Agenda for Sustainable Development\*.
- 4. Exchange views on capacity-building in areas such as micro- and nanosatellites, remote sensing of the Earth, Global Navigation Satellite System (GNSS) technologies, basic space science, health care and disaster mitigation-related applications of space technologies.
- 5. Examine the role of academic institutions and space industry in supporting capacity-building efforts.
- 6. Define strategies to provide cost-effective capacity-building that meet social and economic needs, with a particular focus on developing and emerging countries.

## 3. Expected Outcome and Contribution to UNISPACE+50

#### 2018: UNISPACE+50 YEARS OF SPACE COOPERATION AND DEVELOPMENT

The year 2018 will mark the 50th anniversary of the first United Nations Conference on the Exploration and Peaceful Uses of Outer Space - UNISPACE+50. The Committee on the Peaceful Uses of Outer Space (COPUOS) at its fifty-eighth session in June 2015 endorsed the plan of work for UNISPACE+50. UNISPACE+50 will review the contributions that the three UNISPACE conferences (UNISPACE I, held in 1968, UNISPACE II, held in 1982, and UNISPACE III, held in 1999) have made to global space governance. In line with the 2030 Agenda for Development and sustainable development goals, UNISPACE+50 aims to chart the future role of COPUOS, its subsidiary bodies and the United Nations Office of Outer Space Affairs, at a time of an evolving and more complex space agenda when more participants, both governmental and non-governmental, are increasingly involved in ventures to explore space and carry out space activities. The activities of the United Nations Programme on Space Applications are an integral part of the UNISPACE+50 thematic cycle and are aimed at contributing to outputs under the four pillars space economy, space society, space accessibility and space diplomacy. For up-to-date information on UNISPACE+50 see http://www.unoosa.org/oosa/en/ourwork/unispaceplus50/index.html

At its Fifty-Ninth Session in 2016, the Committee on the Peaceful Uses of Outer Space (COPUOS) endorsed seven thematic priorities for the implementation of UNISPACE+ $50^{\dagger}$ . The objectives of the present Workshop are directly related to the UNISPACE+ $50^{\dagger}$ . "Capacity building for the  $21^{st}$  Century", as well as to the SDG 4 on "Quality Education".

In addition, a series of High Level Fora are being organized by the Office for Outer Space Affairs in preparation for UNISPACE+50, to be held annually from 2016 to 2018. In this context, UNOOSA has defined 4 pillars to address the future of space activities and their role in development: space society, space economy, space accessibility and space diplomacy.

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<sup>\*</sup> See https://sustainabledevelopment.un.org/post2015/transformingourworld

<sup>†</sup> See http://www.unoosa.org/documents/pdf/unispace/plus50/thematic\_priorities\_booklet.pdf

The present Workshop will identify areas of work in which capacity-building can contribute to the furthering of these pillars, in their role as constituents of an inclusive global Space2030 agenda for exploration, innovation and inspiration that calls for strengthened cooperation and governance of outer space activities.

The expected outcomes include:

- Observations and recommendations adopted by the Workshop participants in order to contribute to a strategy for innovative approaches to capacity-building, science, technology, engineering and mathematics (STEM) education, and partnership strengthening in the context of UNISPACE+50<sup>‡</sup> Thematic Priority 7: "Capacity building for the 21<sup>st</sup> Century".
- Workshop conclusions to be presented at the United Nations/United Arab Emirates High Level Forum: Space as a Driver for Socio-Economic Sustainable Development<sup>§</sup>, to be held in Dubai, United Arab Emirates, from 6 to 9 November 2017, and, after further consolidation at the Forum, to form part of the preparation of UNISPACE+50 and to contribute to the development of a Space2030 agenda.

The Workshop presentations will be made available at the website of the Office for Outer Space Affairs. The observations and recommendations made by the participants will be published in an official United Nations document.

## 4. Workshop Programme

The Workshop programme will include keynote addresses, technical presentations at the thematic sessions, discussions and a poster session. Presentations at the technical sessions may include, but are not limited to, the following topics:

- Global, regional and national initiatives to enhance space-related human capacity-building;
- Education on space science, technology and its applications: new methodologies and the way forward for capacity building;
- Contribution of human capacity-building in space science, technology and its applications to sustainable development;
- Industry support of capacity-building activities;
- Best practices and challenges of promoting space education, in particular in developing and emerging countries, and among women and the youth;
- Enhancing public awareness and increasing support for space activities.

A technical visit organized by the hosts will complement the technical sessions. The Workshop will also be an opportunity to commemorate the 60th anniversary of the beginning of the space age – launch of the Sputnik 1 satellite in October 1957.

A round-table and wrap-up session will concentrate on how international and national efforts in development of human potential and capacity-building in space science and technology can support sustainable social and economic development and contribute to the SDGs and UNISPACE+50, in particular to its seventh Thematic Priority: Capacity-building for the 21<sup>st</sup> Century".

The Workshop organizers reserve the right to modify the number and themes of sessions in the final programme.

<sup>\$\</sup>frac{1}{2}\$ See http://www.unoosa.org/oosa/en/ourwork/unispaceplus50/index.html

<sup>§</sup> See http://www.unoosa.org/oosa/en/ourwork/hlf/2017/HLF2017.html

#### 5. Location and Date

The Workshop will be held from 30 October to 2 November 2017 in Samara, Russian Federation. Invited participants will receive a formal invitation letter with further information on available accommodation, logistics and other local arrangements prior to the Workshop.

### 6. Language of the Workshop

The working language of the Workshop will be English. Interpretation to/from Russian will be provided by local co-organizers.

# 7. Participants

The Workshop is expected to bring together participants from national, regional, and international organizations including:

- Academic, educational and research institutions;
- Government and national space agencies;
- Relevant national, regional and international organizations, including representatives from the United Nations System,
- Non-governmental organizations, private sector and industry representatives.

Applicants must have a well-established academic or professional working experience in a field related to the topic of the Workshop. Due consideration will be given to geographic balance. Applications from female participants are particularly encouraged.

The co-organizers of the Workshop will jointly select the invited participants from among the list of qualified applicants. Selection criteria are based on:

- Experience and expected contributions relevant to the Workshop objectives;
- Degree of current involvement in the use of space science, technology and its applications;
- Quality and relevance of the abstract submitted as part of the application; and
- Educational background.

Invited participants will be requested to prepare a presentation of approximately 10 to 20 minutes or a poster on topics relevant to the Workshop objectives. Presentations on actual on-going projects will be of particular interest. In addition, participants may also be asked to act as session rapporteurs or moderators and to contribute to discussion sessions and reporting activities.

## 8. Support to Qualified Applicants

Within the limited financial resources available to the co-sponsors, a number of qualified applicants, who have expressed the need for financial support, will be selected on a competitive basis based on their qualifications, experience and expected contributions to the Workshop and offered financial support to attend the Workshop. The support to applicants may include the provision of a round-trip economy class air ticket between Samara and the applicant's international airport of departure and/or room and board for the duration of the Workshop. En-route and any other expenses, including any changes made to the air ticket provided by the co-sponsors is the responsibility of the participants.

Due to the limited availability of financial resources, it is usually not possible to provide assistance to all qualified applicants who express the need for financial support. Applicants and their nominating organizations are therefore strongly encouraged to identify alternative sources of sponsorship to allow them to attend the Workshop

#### 9. Life and Health Insurance

Life and major health insurance is the responsibility of each selected participant or his/her nominating institution or government. The co-organizers will not assume any responsibility for life and major health insurance, nor for any expenses related to medical treatment or accidents.

## 9. Deadline for Submission of Applications

Applications for participating in the Workshop have to be submitted online through the following webpage:

http://www.unoosa.org/oosa/ourwork/psa/schedule/2017/workshop\_russianfederation\_capacity.html

The completed applications including the signature page with signatures and seals must be received by the United Nations Office for Outer Space Affairs no later than <u>23 July 2017</u> for applicants seeking funding support and <u>10 August 2017</u> for self-funded applicants. Only complete applications received by these deadlines will be considered.

#### 10. Contact Information

For questions related to the Workshop programme and participation opportunities, please contact:

### Mr. Werner Balogh and Mr. Daniel Garcia Yarnoz

Office for Outer Space Affairs

Contact form: http://www.unoosa.org/oosa/en/contact-us/index.html

For questions related to local arrangements of the Workshop, please contact:

# Mr. Sergey Chernikov

Samara National Research University (SNRU)

E-mail: schern2011@gmail.com

For latest information and updates on the Workshop, it is advised that you frequently visit the <a href="http://www.unoosa.org/oosa/ourwork/psa/schedule/2017/workshop">http://www.unoosa.org/oosa/ourwork/psa/schedule/2017/workshop</a> russianfederation capacity.html.