

26 September 2016

**Observations and Recommendations of the**  
**United Nations / International Astronautical Federation**  
**Workshop on Space Technology for Socio-Economic Benefits:**  
**“Integrated Space Technologies and Applications for a Better Society”**

Guadalajara, Mexico, 23-25 September 2016  
in conjunction with the 67th International Astronautical Congress

## **Background**

The 25<sup>th</sup> United Nations/ International Astronautical Federation Workshop on Space Technology for Socio-Economic Benefits under the theme “Integrated Space Technologies and Applications for a Better Society” was organized by the United Nations Office for Outer Space Affairs (UNOOSA) in cooperation with the International Astronautical Federation and co-sponsored by the European Space Agency. The Workshop was hosted by the Mexican Space Agency (AEM), on behalf of the Government of Mexico, and held in Guadalajara, Mexico, from 23 to 25 September 2016. It was one of the 2016 activities of the United Nations Programme on Space Applications, endorsed by the Committee on the Peaceful Uses of Outer Space and the United Nations General Assembly.

## **Objectives and Programme**

The overall Workshop objectives were to:

- Enhance capabilities of countries in the use of space-related technology, applications, services and information for economic, social and environmental development;
- Examine relevant affordable and accessible space-related technologies and information resources;
- Increase awareness among policy- and decision makers to help integrate space solutions into policy- and decision making processes;
- Discuss the role of space solutions in support of the 2030 Agenda for Sustainable Development;
- Strengthen international and regional cooperation in that area;
- Present relevant capacity building initiatives;
- Consider associated legal and regulatory matters; and
- Identify issues for consideration at UNISPACE+50.

The main aim of the Workshop was to arrive at observations, recommendations and concrete ideas on how UNISPACE+50 could be utilised to achieve progress on thematic

**Bringing the benefits of space to humanity**

priority 7 “Capacity-building for the twenty-first century”, which will also support the implementation of the 2030 Agenda for Sustainable Development.

The Workshop programme was structured around the following thematic sessions:

- Session 1: Space and Sustainable Development
- Session 2: Space Technology Capacity Building
- Session 3: Disaster Management and Early Warning
- Session 4: Space for Global Health and Education
- Session 5: Space Solutions for Managing Growing Cities and Populations
- Session 6: Environment and Biodiversity
- Session 7: Connectivity for Reducing Social Divide
- Session 8: Observations and Recommendations and the Way Forward

The thematic sessions were complemented by a poster session, a panel discussion on capacity building and a round table linking the Workshop objectives to the preparations of UNISPACE+50 and how UNISPACE+50 will act as a catalyst for optimizing the future use of space-based solutions to contribute to addressing the World's challenges.

The detailed Workshop programme, presentations and further information is available from the Workshop webpage.

### **Participation**

154 registered attendees from 32 countries, 57 female (37%) and 97 male (63%), attended the Workshop.

### **Draft Observations and Recommendations**

Note: the following observations and recommendations have not been formally edited.

#### ***Observations***

Participants noted:

- The progress with implementing the 2030 Agenda for Sustainable Development.
- The preparations towards UNISPACE+50.
- The major global issues for the planet and the challenges for achieving sustainable development.
- The need for the use of space applications to move from “business as usual” to a “sustainable development” trajectory.
- The growing number and diversity of stakeholders in the field of space activities.
- The ongoing operationalization of space technology and its applications opening up unique opportunities for addressing global issues and building a better society.

Participants further noted:

- The wide range of global issues, including all of the SDGs, that could be addressed by space technology and its applications.
- The need for investment in space capacity building given that human resource is the most precious one for sustainable development of our society.
- The need for science-based data to inform policy and decision making processes in order to progress from “non-evidence and no-policy decisions” to “policy based decisions” and to “evidence based decisions”, to which space data/information can make essential contributions (link to implementation of 2030 Agenda).
- The increasing number of successful applications of crowd-sourced data, potential of combining in-situ data with Earth Observation data, which could also help to tackle major barriers for sustainable development, including corruption.

### ***Recommendations***

#### Participants:

- Noted that education was the basis for establishing the necessary capacity of a country to benefit from space applications and the importance and success of hands-on training activities which are key for countries to build space capacity.
- Recommended that capacity building activities should be designed to include hands-on training activities.

#### Participants:

- Noted that the continuity of programmes was key for the sustainability of capacity building activities and for deriving lasting benefits from space-related activities.
- Recommended that all capacity building stakeholders should aspire to provide a framework to ensure the continuity of programmes, including the necessary governance framework and measures to shield capacity building efforts from political and economic disturbances.

#### Participants:

- Noted the need to reach out to governments, which have taken upon themselves the responsibility for leading the implementation of the 2030 Agenda, to inform them about the importance of space based solutions and the need for the coordination of the activities of space-related organizations in that regard.
- Recommended that UNISPACE+50 should be utilised as an opportunity to unite the activities of space-related organization in that regards.

#### Participants:

- Noted that UNISPACE+50 will be a unique opportunity to re-visit the contributions of space technology and its applications for sustainable development in light of the technical, legal, political, regulatory developments since UNISPACE III.
- Recommended that UNISPACE+50 Thematic Priority 7 “capacity building for the 21st century” should be the framework to consider space capacity building

activities fit for the coming decades to enable countries to implement the 2030 Agenda, including the role of the UN Programme on Space Applications.

#### Participants

- Noted that a Space Solutions Compendium (SSC), a database linked to the SDGs and containing best practices, expert contacts, recommendations, exemplary projects, would be a valuable resource for countries seeking to optimize the use of space technology and its applications.
- Noted that a Space Capacity Index (SCI) measuring the capacity of countries to utilize space solutions would be an invaluable tool to apply results-based management to space capacity building.
- Recommended that UNOOSA should take the lead in developing a Space Solutions Compendium (SSC) and a Space Capacity Index (SCI).

#### Participants further

- Recommended that UNOOSA should consider the observations and recommendations made at the workshop in preparing a plan of work for UNISPACE+50 under its thematic priority 7.
- Recommended that these findings should also be brought to the attention of other relevant UN entities through the UN-SPACE framework, as a contribution to enhance coordination of space-related activities within the United Nations.

#### Finally, participants:

- Thanked the host country, AEM, IAF, co-sponsors and UNOOSA for organizing this Workshop, and
- Noted that 26th UN/IAF Workshop would be held in 2017 in Adelaide, Australia, in conjunction with the 68th International Astronautical Congress.

#### **United Nations General Assembly Report**

A United Nations General Assembly report on the Workshop will be prepared by the United Nations Office for Outer Space Affairs. The report will also be made available at the Workshop webpage.

**For further information visit the Workshop webpage at**

**[http://www.unoosa.org/oosa/en/ourwork/psa/schedule/2016/workshop\\_mexico\\_uniaf.html](http://www.unoosa.org/oosa/en/ourwork/psa/schedule/2016/workshop_mexico_uniaf.html)**