INTERSESSIONAL PANEL OF THE UNITED NATIONS COMMISSION ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT (CSTD)

Geneva, Switzerland
7-8 November 2019

Contribution by Turkey

to the CSTD 2019-2020 priority theme on “Exploring space technologies for sustainable development and the benefits of international research collaboration in this context

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**PRIORITY THEME 2:** Exploring space technologies for sustainable development and the benefits of international research collaboration in this context

1. Can you give examples of projects/policies in your country aimed at using space technologies for sustainable development? What are the main challenges confronted while trying to implement these projects/policies in your country or region?

TÜBİTAK UZAY’s Project aimed at using space technologies for sustainable development:

<table>
<thead>
<tr>
<th>Project</th>
<th>Description</th>
<th>Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 HASSAS-2</td>
<td>Precision Farming</td>
<td>• Produce fertilization maps&lt;br&gt;• Field fertilization applications using produced maps&lt;br&gt;• Disseminate satellite images and analysis data to farmers over the internet</td>
</tr>
<tr>
<td>2 HR E/O Satellite</td>
<td>High resolution earth observation satellite development</td>
<td>• Provide high resolution satellite imagery for sustainable development applications</td>
</tr>
<tr>
<td>3 TURKSAT 6A</td>
<td>Telecommunications satellite development</td>
<td>• Provide satellite telecom infrastructure for sustainable development applications/goals</td>
</tr>
</tbody>
</table>

Main challenges in trying to implement these projects are:

- lack of qualified human resources
- difficulty in accessing space qualified/proven equipment/components due to export restrictions

2. Can you provide examples of policies/projects/initiatives aimed at promoting international research collaboration in the area of space technologies for sustainable development? What are the main challenges confronted in implementing these projects?

Projects/initiatives aimed at promoting international research collaboration in the area of space technologies for sustainable development:

<table>
<thead>
<tr>
<th>Project</th>
<th>Description</th>
<th>Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 GeoCradle</td>
<td>An EU FP7 Project</td>
<td>• Coordinating and Integrating state-of-the-art EO activities in North Africa, Middle East and Balkans&lt;br&gt;• Developing links among GEO related Initiatives towards GEOSS</td>
</tr>
<tr>
<td>2 AKUP</td>
<td>Asia-Pacific Space Cooperation Organization (APSCO) / SSS-2B student small satellite development</td>
<td>• Provide training to students and academicians in the APSCO countries and to build an experience by enabling participation into a satellite project</td>
</tr>
</tbody>
</table>
3. RADCAL APSCO Radiometric Calibration of Satellite Sensors Projects
   - Developing radiometric calibration capabilities of the APSCO countries

4. DSSP APSCO Data Sharing Service Platform
   - Establishing a platform to disseminate satellite data among the APSCO countries

5. SMMS APSCO Joint Small Multi-Mission Satellite Constellation Program
   - Developing small satellites for the APSCO countries

Main challenges in trying to implement these projects are:

- language and culture barriers among the international participants,
- lack of financial mechanisms to develop international cooperation

3. What are the actions that the international community, including the CSTD, can take to leverage the potential of space technologies for sustainable development, including through international research collaboration in this context? Can you give any success stories in this regard from your country or region?

Actions that the international community, including the CSTD, can take to leverage the potential of space technologies for sustainable development;

- promoting student exchange programs to lift the language and culture barriers in the international space community
- education and training activities for non-space faring countries
- providing unlimited/unrestricted access to space qualified technologies/products/components
- devising financial mechanisms to foster international cooperation

4. Could you suggest some contact persons of the nodal agency responsible for projects/policies, related space technologies for sustainable development and international research collaboration in this context as well as any experts (from academia, private sector, civil society or government) dealing with projects in this area? We might contact them directly for further inputs or invite some of them as speakers for the CSTD inter-sessional panel and annual session.

Contact persons of the nodal agencies responsible for projects/policies:

<table>
<thead>
<tr>
<th>Name</th>
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</tr>
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</table>
5. Do you have any documentation, references, or reports on the specific examples on the priority theme in your country or region?

Documentation, references, or reports on the specific examples on the priority theme in Turkey can be accessed from [www.surdurulebilirkalkinma.gov.tr](http://www.surdurulebilirkalkinma.gov.tr)

Among those given in the URL, below listed documents are worth emphasizing:

- First National Communication on Climate Change of Turkey,
- Turkey’s Sustainable Development Report Claiming the Future 2012
- Report on Turkey’s Initial Steps Towards the Implementation of The 2030 Agenda for Sustainable Development
- Baseline Analysis of Turkey against Sustainable Development Goals Project (Draft)