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Italian Space Agency (ASI)

ASI’s survey
to contribute to the achievement of the SDGs
Objectives of the survey

Survey of all ASI activities and programs indicated within the latest ASI Triannual plan of activities 2018-2020, to highlight their possible contribution to the SDGs

Assess current ASI contribution to the UN Agenda 2030, evaluate expected impact of new activities and programs and, possibly, improve ASI contribution to sustainable development challenges

ASI Management and employees
Many ASI activities and programs, covering almost all space sectors, from EO to navigation, telecommunications, robotic and human exploration and even launchers, contribute to one or more SDGs and their specific targets, some directly, others indirectly and some others have the potential to contribute in the future.
ASI EO programs for the SDGs
• Provision of COSMO-SkyMed data to countries affected by major disasters
• COSMO-SkyMed data for the EU Copernicus program
• COSMO-SkyMed data for CEOS and for its Recovery Observatory project
• COSMO-SkyMed data for national and European institutions fighting against illegal activities and the organized crime
CSK data provided to national and international scientific institutions through public “Open Calls”
(goal 9, target 5)

Examples of on-going projects

- Provision of COSMO-SkyMed data to the Addis Ababa University, IGSSA (Ethiopia) to investigate dyke propagation along rift axis of divergent plates
  (goal 11, targets 5 and b)

- Provision of COSMO-SkyMed data to the Indian Institute of Technology of Delhi (India) for the estimation of snow and glacier melt runoff in Beas River Basin
  (goal 13, target b)

- Provision of COSMO-SkyMed data to Naples University for marine debris monitoring
  (goal 14, target 1)
PRISMA for the SDGs

Hyperspectral technology

ASI mission for EO equipped with innovative electro-optical instrumentation capable of identify the chemical and physical characteristics of the Earth surface

Launch in 2018
ASI’s navigation and telecommunications programs for the SDGs
- Contribution to the EU Galileo program for satellite navigation
- Development of satellite navigations prototypes, applications and services for the maritime, railway and road transport domains
Ultrace-Broadband Italian Satellite (SIGMA/URBIS) to end the digital divide in Italy by proving ultra-broadband connection on the entire national territory.
Robotic and human space exploration for the SDGs
ExoMars 2020 mission

• **Ma_MISS** (Mars Multispectral Imager for Subsurface Studies) within the ExoMars 2020 rover drill, to select subsoil samples

• **MicroMED** instrument within the Mars 2020 mission Dust payload, to study Mars dust and associated electromagnetic fields
Italian Bio-regenerative Systems (IBIS) working group, for the study and development of closed bio-regenerative systems, which includes technologies for atmosphere revitalization, food production, water recycling, and organic waste recycling.
ASI for capacity-building
ASI for capacity building

• ASI and Italy
  o ASI scholarships for Italian students and researchers
  o Training programs
  o Italian Master course in space institutions and policy

• ASI and Argentina
  o Support to the establishment and development of the Gulich Institute
  o Scholarships for the MAIE Master Degree
  o Provision of ASI experts

• ASI and Kenya
  o Annual scholarships for students and professionals
  o Support to the joint International Post-Graduate Course in Space Mission Design and Management
  o Support to joint Italian-Kenyan research projects

• ASI and Mexico
  o Joint research projects
Open Universe initiative

- Open Universe prototype portal established at the ASI Space Science Data Centre (SSDC)
- Integration of several sources of space science data
Goal of the ISF initiative

Promote a greater involvement of Universities and Academia in space activities to foster space knowledge dissemination and capacity building and find better solutions to global challenges.
International Centre for Space Education in Africa at the BSC

Prepare African students and trainee to become Africa’s space leaders and foster regional and international cooperation

- Addressed to all African countries
- Open to collaborations with international partners
- First space workshop by the end of 2018
THANK YOU
www.asi.it