ANNOUNCEMENT OF OPPORTUNITY

Training Course on

Remote Sensing, Space Sciences and Space Policy

Organized by

The Italian Space Agency (ASI) in collaboration with Kenya Space Agency and with the support of United Nations Office for Outer Space Affairs (UNOOSA)

Hosted by

The ASI Broglio Space Centre (BSC)

Malindi, Kenya, 9 -13 December 2019

1. Background

Since the beginning of the space era, international cooperation in the peaceful uses of outer space has provided impetus for the development of international mechanisms and infrastructures for space cooperation at international, regional, interregional and national levels. In addition, in 2015, after the adoption of the 2030 Agenda calling for action by all Countries to improve the lives of people everywhere, governments, civil society and the United Nations started mobilizing efforts to achieve the Sustainable Development Goals (SDG's) set by the Agenda itself.

The use of space technologies in the attainment of higher levels of social, economic and environmental development has gained increasing importance and today they are key to the achievement of the SDGs and 2030 Agenda. To this regard, the Broglio Space Center (BSC) in Malindi, Kenya, represents one of the few facilities in the world that, thanks to its equatorial position and consolidated infrastructure with high-level technological capabilities and qualified human resources, can definitely contribute - with other international space institutions - to the goals of educating and training young African students to capacity building in Space Sciences and technologies as well as to the use of satellite data, in particular, of Remote Sensing data. Being centered on the legacy and expertise developed by Italy and Kenya in more than 50 years of cooperation in space activities, the Broglio Space Centre can effectively contribute to the promotion and achievement of the SDG's. This is why Italy and Kenya are committed to building up an International Center for Space Education at the BSC in Malindi and provide an opportunity to further demonstrate the broad societal benefits of space as an area of inspiration, integration and innovation to address the long-term development concerns of society related to the 2030 Agenda for Sustainable Development.

This Training course is aimed at uncovering the potential of Earth observation, remote sensing, space sciences as tools for providing fundamental applications and services and space policy.

2. Partners



The United Nations Office for Outer Space Affairs (UNOOSA) works to promote international cooperation in the peaceful use and exploration of space, and in the utilisation of space science and technology for sustainable economic and social development. The Office assists any United Nations Member States to establish legal and regulatory frameworks to govern space activities and strengthens the capacity of developing countries to use space science technology and applications for development by helping to integrate space capabilities into national development programmes.



The Italian Space Agency was founded in 1988. Its purpose is to coordinate all of Italy's efforts and investments in the space sector that had begun in the 1960s with the management of the San Marco Project in Kenya.

Within over twenty years' time, ASI became one of the most significant players in the world in space science, satellite technologies and the development of mobile systems for exploring the Universe. Today, ASI has a key role at the European level where Italy is the third contributor country to the European Space Agency.

ASI is strongly engaged in remote sensing activities with the scope to predict and prevent environmental disasters, ensure rapid intervention in crisis-stricken areas and measure the effects of climate change. For example, the Italian program COSMO-SkyMed, is aimed at improving our knowledge of the Earth.

It is involved at the international level in many programs like the International Space Station, missions to Mars, Jupiter and Saturn.

Italy, through the work of ASI and the Italian industry, also pursues a tradition in the field of space propulsion research. In particular, ASI performs a leading role in the VEGA European program, the small rocket fully designed in Italy and launched from the ESA launch base of Kourou in French Guiana.



Kenya Space Agency

The Kenya Space Agency was established in 2017 with the mandate to promote, coordinate and regulate space activities in Kenya. The Agency became operational in 2018 following the appointment of the Board of Directors. Kenya deployed its first nano-satellite, 1KUNS-PF, from the International Space Station on 11 May 2018 through UNOOSA- Japan Aerospace Exploration Agency cooperation Programme called KiboCUBE.

Kenya hosts the Luigi Broglio – Malindi Space Centre established by the Government of the Italian Republic in 1964 as an Equatorial Range for satellite launch. The Centre currently provides telemetry tracking and control services as well as acquisition of scientific data from astronomy satellites. This Centre has become an important resource for capacity development in space science and technology within Africa.

3. Training Course Objectives

The participants will acquire basic knowledge and training on Remote Sensing with an emphasis on COSMO-SkyMed System and other ASI programs and services, on Space Sciences and observations using real data from satellites, as well as an overview of the key contemporary issues in international space e environment with the main space programs.

The training course will also contribute to international cooperation by providing opportunity to exchange updated information among the participants.

4. Training Course Programme

The training format includes lectures, presentations s, exercises and technical visits. The following topics will be addressed:

- Earth Observation data processing to develop applications and remote sensing possibilities for exploration; environmental challenges using remote sensing; remote sensing as a tool to shape the future;
- Space Science activities and programs. Open-source software for space-borne image and scientific processing; use of scientific tools from the Italian "Open Universe" Initiative;
- key contemporary issues in space international environment: space governances, space policies and international space law.

5. Sponsorship of the Training course

The Italian Space Agency and the Kenya Space Agency are responsible for organizing the Training course with the support of the United Nations Office for Outer Space Affairs; UNOOSA).

6. Language of the Training course

The working language of the training course is English.

7. Financial support

Within the limited financial resources available, up to 10 selected participants, as specified below, will be offered financial support to attend the training course. This financial support will defray the cost of travel (a round trip ticket – most economic fare – between the airport of international departure in their home country and Malindi, plus transportation to/from Malindi and Malindi/BSC), and full board expenses during the duration of the training course.

8. Admission requirements

The candidates who would like to participate in the course must comply with the following criteria at the time of the application:

- age of candidate should not exceed thirty (30) years;
- be a citizen and resident of an African Country;
- have a good command of the English language;
- have at least a Bachelor's degree;
- be able to use the experience gained in the study of the following fields: physics, mathematics, engineering and aerospace disciplines.

Gender equality will be respected and women's participation will be promoted.

9. Application Procedure

The present Announcement of Opportunity is addressed to the citizens of all African countries (with the exception of the hosting and co-organizing country for which there will be an a separate procedure) in order to choose the best candidates to the course who possess the mandatory requirements listed under point 7.

The <u>Governmental Institution/University/Research Institution</u> of each country, if interested, should send the CV of their best candidate exclusively to the e-mail address indicated below. No more than one student from each country will be selected;

• the candidate application must be submitted by a University or by a Research Institution or by a Governmental entity

- the Application Form must be completed with the following attachments:
 - Copy of the University Diploma
 - Copy of a valid passport issued by the Country of residence
 - A updated Curriculum Vitae written in English language both in a Word written file without signature and as a scanned PDF file with signature
 - Three (3) signed letters of reference

A dedicated ASI evaluation panel will proceed with a selection among the received applications and only up to **10 students coming from 10 different countries will be chosen** on the basis of a ranking according to the below specified selection criteria.

Each country cannot have more than one student selected.

Kenya students admission, in addition to the maximum 10 from the other African countries, will be defined through a separated selection process.

10. Deadline for Submission of Applications

The completed application form, properly endorsed by the applicant's institution, should be mailed to the Italian Space Agency (ASI) at the e-mail address: **BSCtrainingcourse@asi.it** no later than **20 October 2019**.

11. 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 course organizer will not assume any responsibility for life and major health insurance, nor for expenses related to medical treatment or accidents.

12. Point of contact

For <u>information</u> regarding the submission of nominations for attendance and funding, please contact <u>Ms. Sabrina Ricci</u> at the following e-mail address: BSCtrainingcourse@asi.it

13. Application Form

The Application Form is attached to the present Announcement of Opportunity.

Application Form							
Training Course Name:		Hosted By:			Date:		
Use and Applications Remote Sensing,		ASI Broglio Space Centre					
Space Sciences and Space Policy		Malindi (Kenya)					
9 – 13 December 2019				_			
First Name:		Middle Name:		Last Name:			
Date of birth:			Gender:		Nationality:		
Affiliation:							
Type of organisation (Education / Research Institute / Government):							
Present title:							
Present responsibilities:							
Mailing address:							
Tel (Including country code): E-mail:							
Required (mandatory) information							
Names as in Passport: Country of Passport:							
Passport No: Date of is		issue: Date of	of expiry:	expiry:		Place of issue:	
Educational qualification			Subject/Field:				
(Bachelor/Master/Doctorate):							
Why do you want to attend this Training Course? Please, explain in detail:							
The undersigned certifies that the above-mentioned statements are true, complete and correct.							
Applicant's signature:		Place: Date:					
The application of the candidate to the above-mentioned Training Course is hereby approved in the interest and benefit of our organisation/institution/Government authority, that will bear the relevant insurance costs. Name and Signature of authorised person:							
Designation:		Seal :			Date:		
Please fill up this form and attach a copy of a valid passport, a copy of the University Diploma, 3 (three) signed letters of reference, a curriculum vitae to be submitted as: 1) a Word File by e-mail (without signature) and 2) as a scanned PDF file with signatures. Please send the files to: BSCtrainingcourse@asi.it							