



## The Nairobi Page (to be added to the Trento Space Statement)

### *2<sup>nd</sup> International Space Forum (ISF) 2017 at Ministerial level – The African Chapter “Space Science and Academia for Sustainable Development in Africa”*

On February 13<sup>th</sup>, 2018, the Kenyan Minister of Defense, Ministries of Science, University and Research, Space Authorities, Space Agencies, representatives from International Space Organisations and senior space experts from almost 40 countries met in Nairobi (Kenya), under the auspices of the International Astronautical Federation (IAF), the Italian Space Agency (ASI) and the Kenyan Ministry of Defence, for open and productive discussions on how space science and education can support the understanding and exploitation of space benefits for Africa’s socio-economic development.

The 1<sup>st</sup> Ministerial International Space Forum was jointly organised by the Italian Space Agency (ASI), the International Astronautical Federation (IAF) and the International Academy of Astronautics (IAA) under the mandate of the IAF Vice President for Science and Academia relations, in Trento (Italy), where 42 governmental delegations attended and adopted the Trento Space Statement.

In Nairobi, delegates, representatives of academia and experts exchanged views, shared experiences and made statements, which declared, inter alia, that:

- Space is a global and multidisciplinary system requiring high-level technical and scientific knowledge, in both
- upstream and downstream areas;
- Universities and academia constitute a worldwide network of privileged knowledge that could support the design, development and exploitation of space programs, regardless of any geographical location;
- African universities and academia need to become part of the global space network to benefit from scientific and technological knowledge;
- Space applications and services should be leveraged to protect the African environment, ensure a peaceful and
- secure continent, manage natural resources, manage diversity so as to convert it into a source of wealth, harmony and socio-economic transformation.

Delegations heard and considered presentations from space experts on three main topics:

- **Capacity Building:** Space disciplines represent an opportunity to develop high-level technical and scientific, as well as legal and regulatory knowledge in Africa, which will contribute both to the achievement of Africa’s self-reliance and the attainment of Africa’s Agenda 2063;
- **Environmental Sustainability:** Ecological integrity and an equitable allocation of the available resources are closely linked to sustainable development in Africa. Earth observation, navigation and telecommunication satellites, are precious tools for gathering information and protecting the environment;
- **Space Partnerships:** Partnerships and collaborations among countries with different levels of space knowledge would support dissemination of space knowledge and technology transfer. Partnerships with the private sector will help leverage the necessary funds for a vibrant space enterprise, reserving a key role to the academia, so as to ensure the success of a quad-helix model of economic growth within the continent.



Governmental representatives and delegates noted that:

- Space activities, services and technologies could support the implementation of the Africa Agenda 2063;
- Capacity Building in space is a key to develop high-level technical and scientific knowledge in Africa;
- Investments in indigenous human capacity is a priority objective;
- Space cooperation would be a driver for Capacity Building and sustainable development in Africa.

Ministries, Heads of delegations, governmental representatives and experts welcomed the 2<sup>nd</sup> International Space Forum 2017 – The African Chapter – highlighting the importance of considering the following points as the first results of discussions in Nairobi:

- Involvement of all African countries at science, university and research level could increase the number of professionals and experts in the Space sector;
- Networking amongst African universities and academia would better support space capacity building by pooling and coordinating the existing resources and by disseminating knowledge among all African countries;
- Consider the existing space centres and facilities in Africa as the starting point assets, upon which to build up a network of infrastructures to develop a sustainable Capacity Building programme and road map;
- The International Center for Space Education in Africa, located at the Broglio Space Center (BSC) in Malindi (Kenya), could collect the African needs and propose space application activities and training for the development of the African Capacity Building to achieve the goals of the United Nations 2030 Agenda for sustainable development;
- The African Resource Management Satellite Constellation (ARMSC) is an appropriate continental initiative that could be relied on to address Environmental Sustainability;
- Intra-Africa and international partnerships should be leveraged on a mutually beneficial basis to foster regional collaboration and to ensure security, peace and stability. The proposed African Space Agency would represent a key institution in this endeavour;
- The second International Space Forum in Nairobi will contribute to UNISPACE+50 and to the implementation of the goals of the UN Agenda 2030.

The African delegations expressed the wish to replicate this space forum model at a regional level within Africa to enhance participation by local universities, scientific communities, space experts, space lawyers and representatives from the private sector, as this will complement an existing initiative, namely the African Leadership Conference (ALC) on Space Science and Technology.