

GENERAL EXCHANGE OF VIEWS

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National statement of the Federal Republic of Nigeria on General Activities

By

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Nigeria

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Madam Chair, distinguished delegates, my delegation and I bring you best wishes from the good people of the Federal Republic of Nigeria.

My delegation also wishes to commend the sterling leadership qualities of Ms Arti Holla – Maini, Director, United Nations Office of Outer Space Affairs, (UNOOSA) in pursuant of the key objectives that inspired the formative ideas of this well evolved Committee in 1958.

Over the years, the Federal Republic of Nigeria has continued to pursue key space programmes, activities and ideas in line with the directives, stipulations and regulations of the COPUOS and this has continued to gain momentum through your cooperation and mutual understandings.

Madam Chair, it is on this note that I would like to present the general activities of the Nigerian National Space Research and Development Agency (NASRDA) in the year 2024 to the Committee.

1. National Space Research and Development Agency celebrates 25th Anniversary

Madam Chair and distinguished delegates, my delegation would like to bring to your notice that the Nigerian National Space Research and Development Agency (NASRDA) celebrated 25 years of establishment in 2024. The one-week long event which commenced on the 25th of November 2024 and climaxed on November 29th 2024 provided the country a greater opportunity to interface with other space fairing nations, organizations and private sectors.

2. Presidential approval for Space Regulations and Spectrum Management

Madam Chair and distinguished delegates, I am delighted to inform you that the President of the Federal Republic of Nigeria, His Excellency, President Bola Ahmed Tinubu, GCFR, has approved space regulations and spectrum management in Nigeria by the National Space Research and Development Agency (NASRDA). As a result, the department of space regulation and spectrum management has been established in NASRDA. The regulatory framework has been developed by the Agency.

3. Presidential approval to mainstream space technology into Revenue Generation

The President of the Federal Republic of Nigeria, His Excellency, President Bola Ahmed Tinubu, GCFR, has also mandated the National Space Research and Development Agency (NASRDA) to mainstream space technology into the generation of revenue in Nigeria. Several strategies are being developed to achieve this mandate.

4. Establishment of Space Enterprise Department

Madam Chair and distinguished delegates, I am happy to inform you that the National Space Research and Development Agency (NASRDA) has established the Space Enterprise Department to deepen and expand the space economy base of Nigeria and the African continent. Following the

establishment of the department, NASRDA initiated the African Space Economy conference and exhibition in collaboration with the Abuja Chamber of Commerce and Industries (ACCI). NASRDA and ACCI co-organized the conference in year 2024. This initiative was deliberately targeted to foster and facilitate dynamic exchange of knowledge and to provide insights into the evolving field of space economy with the ultimate goal of intensifying the development of the African space entrepreneurial capacity and capability.

Madam Chair, distinguished delegates, I am glad to inform the committee that the second edition of the African Space Economy Conference and Exhibition has been scheduled to hold from 17th to 19th of June 2025 at the Abuja Chambers of Commerce and Industry, Abuja, Nigeria. You are all invited to participate at the regional conference.

5. Nigeria to launch new sets of satellites: Partnership with Proforce Galaxies Limited

Madam Chair, distinguished delegates, Nigeria launch NigeriaSat-2 and NigeriaSat-X earth observation satellites in 2011 with design lifespan of 7 years. The satellites were developed in partnership with Surrey Satellite Technology Limited (SSTL) and have been used for several space applications projects. I am happy to report that Nigeria has concluded plans to deorbit the satellites and has written to SSTL to conclude the deorbiting processes for the satellites.

I am also happy to report that Nigeria has taken a bold step in opening up her space industry for private sector participation. In realization of this noble idea, the National Space Research and Development Agency has signed a Memorandum of Understanding with Proforce Galaxies Limited, a private liability company incorporated under Nigerian Law. This partnership aims to design, build and launch three optical satellites: Nigsat 3, Nigsat 4, and Nigsat 5 with sub meter resolution as well as one Synthetic Aperture Radar (SAR) satellites. The launch of these satellites and utilization will enhance the attainment of the SDGs for Nigeria and the African continent.

It will also enhance capacity building in the Nigerian space sector.

6. European Commission/European Space Agency/ National Space Research and Development Agency Collaboration on Climate Smart Agriculture.

Madam Chair and distinguished delegates, the European Commission, European Space Agency and National Space Research and Development Agency, have agreed to collaborate on the deployment of space technology for Climate Smart Agriculture in Nigeria. This is an integral part of the "Africa-EU Space Partnership Programme (Africa SPP)" which is complemented by the national Action "Support to Climate-Smart Agriculture for Development (Agri-CADE)". Both Actions are responding directly to priorities of the Global Gateway strategy related to the twin digital and green transition of Africa.

7. Development of a baseline pixel level blockchain geospatial information service for Nigeria

The National Space Research and Development Agency is embarking on the development of a baseline pixel level blockchain geospatial information service for Nigeria. The project will focus on integrating blockchain-enabled earth observation for sustainable resource management in Nigeria. This initiative will leverage pixel-level geospatial analysis and blockchain for real-time monitoring and transparent secure data sharing. It will address national priorities such as climate change monitoring, natural resource management, and environmental sustainability. The project seeks to create a decentralized platform for tracking environmental data, land use dynamics, and resource allocation, enabling stakeholders to make informed decisions.

8. Madam Chair, distinguished delegates, within the framework of international cooperation and partnership, Nigeria, through the National

Space Research and Development Agency implemented the following activities.

8.1. NASRDA's High-Resolution Cropland Mapping of Nigeria in Partnership with NASA, University of Delaware and IITA

NASRDA is in partnership with NASA (Under the NASA Harvest program), the University of Delaware and International Institute for Tropical Agriculture (IITA) to adopt the use of proximal sensors (GoPro cameras) mounted on cars and bikes to provide high-resolution images of crop types. The images, in addition to advanced satellite Earth Observation data and deep learning approaches, are being adopted to map croplands in Nigeria. We have successfully mapped croplands in 14 states and aim to produce a high-resolution cropland map of Nigeria by 2025. A high-resolution cropland map of Nigeria is crucial to address the twin challenges of meeting the growing food needs while reducing environmental footprint.

8.2. Republic of India

In view of the foregoing and in the spirit of international cooperation, the Federal Republic of Nigeria and the Government of the Republic of India signed a memorandum of understanding on cooperation in the exploration and uses of outer space for peaceful purposes. Following the agreement, both countries have been working together to mainstream space technology for national development. As a result, a NASRDA Specialized *Indian Technical and Economic Cooperation* (ITEC) training Program was developed by both countries. 25 NASRDA officers were sent to India for the specialized training from 6th to 17th of January 2025. The training was fully funded by the Government of the Republic of India. The Government of the Federal Republic of Nigeria is grateful to the Government of the Republic of India for its support and goodwill.

8.3. People's Republic of China

(i) China Land Satellite Remote Sensing Application Centre (LASAC)

Our delegation is delighted to report that the People's Republic of China through the China Land Satellite Remote Sensing Application Centre (LASAC) has established in Nigeria National Space Research and Development Agency (NASRDA) an International Node from Natural Resources Satellite Remote Sensing Cloud Services Platform owned by LASAC. This was sequel to the Memorandum of Understanding signed by NASRDA and LASAC. As a result, from the beginning of January 2023, Nigeria through NASRDA has continuously receive satellites images over Nigeria on daily basis from the following Chinese satellites: ZY3-01, ZY3-02, ZY3-03, GY-1, GF-1B, GF-1C, and GF-1D. Additional archive images were received for 2020 and 2022. These satellite images are currently used for various space applications projects.

(ii). Aerospace Information Research Institute, Chinese Academy of Sciences (AIRCAS)

Madam Chair and Distinguished delegates, I would like to report that the Federal Republic of Nigeria through National Space Research and Development Agency signed a memorandum of understanding with the Aerospace Information Research Institute, Chinese Academy of Sciences (AIRCAS) to jointly implement the Crop Watch project. Following the signing of the MoU by both countries, I am happy to report that the following space applications activities with focus on food security have been carried out:

- a. Development and circulation of Crop Watch Bulletin and Quarterly Report on Global Crop Production.
- b. Participation in a one-day stakeholders hybrid dialogue customization of Nigeria's crop watch platform.
- c. On Capacity Building:

- i. Two officers from the National Space Research and Development Agency participated in the regional workshop on crop watch innovative cooperation programme, titled: "Advancing satellite-based crop monitoring to increase resilience in the face of global food insecurity". The workshop was held in Port Louis, Mauritius.
 - ii. Officers from the National Space Research and Development Agency participated in the Workshop and Field Data Collection Training using GPS Video and GIS (GVG) App. The workshop was hosted by NASRDA, in Abuja, Nigeria.
 - iii. Officers from NASRDA participated in a training programme on the use of Crop watch Cloud and the Model Calibration platform for Nigeria. The training was organized by AIRCAS key Laboratory, Beijing, China.
 - iv. NASRDA officers are currently involved in the Young Scientist training programme in Remote Sensing applications in Agriculture at the China Academy of Science institutes and AIRCAS facilities. On completion, the officers will be awarded M.Sc. and Ph.D.
- d. Within the framework of the Cropwatch programme, The Federal Republic of Nigeria and the Republic of China organized a regional workshop on advancing satellite-based crop monitoring to increase resilience in the face of global food insecurity. The workshop was hosted in Abuja, Nigeria, with participants from some West Africa countries and Cameroon.
- e. The Federal Republic of Nigeria and the Republic of China have agreed to establish a regional crop watch centre , the regional center will by located in Abuja, Nigeria. The agreement between AIRCAS (China) and NASRDA (Nigeria) was signed in Abuja on the

2nd of July 2024. The regional Centre will be built by AIRCAS while Nigeria will provide the land for the infrastructure.

(iii) Shanghai Astronomical Observatory (SHAO) of China

Madam Chair and distinguished delegates, the National Space Research and Development Agency in collaboration with the Shanghai Astronomical Observatory (SHAO) of China is building and operating 13-meters Very Long Baseline Interferometry (VLBI) at NASRDA's Centre for Geodesy and Geodynamics, Toro, Bauchi State. Distinguished Delegates, the VLBI project commenced on the 14th of November 2024 with the construction of the Antenna Tower which has reached advanced level (at the 3rd and final floor). It is expected that the installation and testing will commence at the end of January 2025 after the completion of the Antenna Tower. The VLBI is a multi-million-dollar project that is primarily aimed at satellite tracking for deep space research, national defense and monitoring geodynamics phenomena in Nigeria and the Sub-Saharan Africa such as earthquakes and volcanic eruptions.

8.4. Group on Earth Observation (GEO)

Madam Chairperson and distinguished delegates, the Federal Republic of Nigeria has continued to play supporting roles in the activities of the Group on Earth Observation (GEO). The Federal Republic of Nigeria is a member of the GEO executive committee. I am delighted to inform the Chair that the Federal Republic of Nigeria successfully hosted the second GEO Nigeria event from 25th to 26th November, 2024. The event was attended by stakeholders within and outside Nigeria.

8.5. Space Exploration and Research Agency (SERA)

Madam Chair and distinguished delegates, the Federal Republic of Nigeria through the National Space Research and Development Agency is committed to transforming her space industry and unlocking its full potentials. In pursuance of this developmental objective, the Federal Republic of Nigeria commenced partnership with Space Exploration and

Research Agency (SERA) for an innovative space flight which is anticipated to be a debut. The project is in furtherance of an objective of SERA's cooperation with Blue Origin for human spaceflight program for six people from countries that have hitherto had limited access to space. The program is design to encourage young Nigerians to develop passions for career in space science technology.

Madam Chair and distinguished delegates, I would like conclude by conveying the good wishes of President Bola Ahmed Tinubu (GCFR), President and Commander In-Chief of Nigerian Armed Forces, to this noble committee. He extends his sincere regards to the distinguished delegates as Nigeria anticipates future collaboration in pursuit of her homeland compliance with the objectives of COPUOS.

Thank you.