

**THE SIXTY-SECOND SESSION OF THE UNITED NATIONS  
COMMITTEE ON THE PEACEFUL USES OF OUTER SPACE, SCIENTIFIC  
AND TECHNICAL SUBCOMMITTEE, VIENNA, 3–14 FEBRUARY 2025**

NATIONAL STATEMENT OF THE FEDERAL REPUBLIC OF NIGERIA ON  
SPACE-SYSTEM-BASED DISASTER MANAGEMENT SUPPORT.

by

Dr. Godstime Kadiri James

Director, Department of Strategic Space Applications

National Space Research and Development Agency (NASRDA)

Madam Chair, distinguished delegates, the "United Nations Platform for Space-based Information for Disaster Management and Emergency Response" (UN-SPIDER) was established by the United Nations General Assembly through its resolution 61/110 of 14 December 2006.

Nigeria, through the National Space Research and Development Agency, is currently hosting the UN-SPIDER Regional Support Office in Abuja. I am delighted to inform the sub-committee that several activities were implemented in 2024.

**A. Participation of Nigeria in UN-SPIDER programmes:**

1. UN-SPIDER Regional Support Office Meetings held on 10th June, 30th September and 17th December, 2024.
2. UN-SPIDER Bonn international conference on space technologies for early warning systems in Bonn, Germany from 12th – 14th March, 2024.
3. Annual meeting of UN-SPIDER Regional Support Offices, UN Campus, Bonn, Germany on 15 March 2024.

4. UN-SPIDER/AIRBUS/ZFL INTERNATIONAL WORKSHOP ON FLOOD MAPPING WITH SAR AND DEMs held in Bonn, Germany from 8th – 10th October, 2024.

## **B. Application of Space Technology for Flood Disaster Management in Nigeria**

Madam Chair, distinguished delegates, the National Space Research and Development Agency apply space technology to floods management by leveraging the Un-SPIDER Recommended Practice on flood using Sentinel-1 SAR Data in Google Earth Engine:

1. Flood Mapping of the two major transboundary rivers in Nigeria: the River Niger and River Benue.
2. Mapping the Alau Dam flood in Borno State.
3. Assessment of flood events in Bauchi, Kogi, Adamawa, and Taraba States.
4. Monitoring the Lagdo Dam in Cameroon.
5. Analysis of flood-affected areas in various Nigerian states over the past years.

## **C. Monitoring of Seismic Activities in Nigeria**

From the 13<sup>th</sup> to 17<sup>th</sup> of September 2024, Abuja, Nigeria, experienced earth tremor, attributed to the gradual strain withdrawal and fault reactivation beneath the earth surface. The National Space Research and Development Agency was able to monitor the tremor through its network of Global Navigation Satellite Systems (GNSS) receivers and seismic stations setup in different parts of the country. The tremor was recorded by the monitoring stations. Efforts are ongoing to densify the monitoring stations in Nigeria and also launch a dedicated satellite to monitor seismic activities in the country.

#### **D. 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 (70% completion). It is expected that the installation and testing will commence at the end of February 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.

#### **Eulogy: Dr Adigun Ade Abiodun**

Madam Chair, distinguished delegates, I will like to end on a sad note by announcing the loss of Dr Adigun Ade Abiodun, an erudite worldclass space scientist from Nigeria who was elected and served as the Chairman of the United Nations Committee on the Peaceful Uses of outer Space – *COPUOS* (June 2004 – June 2006). He also served as the United Nations Expert on Space Applications from 1981 November to 1999 September. May his soul rest in peace. Amen