



STATEMENT BY PROF. KWABENA FRIMPONG-BOATENG, MINISTER FOR ENVIRONMENT, SCIENCE, TECHNOLOGY AND INNOVATION OF THE REPUBLIC OF GHANA AT THE 61ST MEETING OF THE COMMITTEE ON THE PEACEFUL USES OF OUTER SPACE

Mr. Chairman,
The Director, UN Office of Outer Space Affairs,
Excellencies,
Distinguished delegates,
Ladies and gentlemen,

It is a great pleasure to be part of this august meeting.

Ghana recognizes the significant contributions of space science and technology towards achieving its Sustainable Development Goals.

Ghana and eight other African countries will host the second phase of the Square Kilometre Array (SKA) Project, which will create the world's biggest radio telescope. As part of the project, redundant telecommunications antennae in these countries are to be converted into Radio Telescopes to form an array of radio telescopes as part of the Global (Very Long Baseline Interferometry) Network, for space exploration as a precursor to the SKA.

In collaboration with the SKA-SA and the Department of Science & Technology-South Africa, Ghana became the first African country to successfully convert its redundant 32 metre earth satellite communication dish into a radio astronomy telescope in August 2017. The Observatory, which is located about 25km north-

west of the national capital, Accra, is in the science commissioning stage involving validation of the instruments for global science operations and research.

Mr. Chairman,

Let me use this occasion to once again express the Government of Ghana's appreciation to all stakeholders who contributed in making the establishment of the Ghana Radio Astronomy Observatory a success. Special thanks go to the SKA-South Africa and the Department of Science and Technology, South Africa for their immense contribution towards the successful completion of the project.

The Ghana Radio Astronomy Observatory also functions as a research and training facility for students, scientists and engineers in Ghana and the West Africa Region. It is also helping in the development of human capital to boost sectors of the Ghanaian economy in fields such as software engineering, mechanical and structural engineering, electronic and electrical engineering, astronomy, astrophysics, cosmology and space science and technology.

It will ultimately prepare Ghana and the rest of Africa for the global Square Kilometre Array (SKA) Project.

An integral part of the Ghana Radio Astronomy Observatory will be a Weather Station, which will include a Global Navigation Satellite System reference receiver, a Geodetic-level antenna and Seismic System to provide vital data on the weather, earthquakes and plate tectonics.

Mr. Chairman,

In 2014, students from All Nations University, a private University in the City of Koforidua in Ghana designed, developed and installed an Amateur Ground

Station that is able to track and communicate with amateur radio satellites, research and educational satellites operating in the Very High Frequency (VHF) and Ultra High Frequency (UHF) in low earth orbit.

The ground station made history by successfully tracking and receiving signals from the International Space Station (ISS) on 18th and 24th December 2014. This was the first time a Sub-Saharan African University Ground Station designed and built by students was able to make contact with ISS.

The All Nations University Ground station was awarded a Contact Verification Card (QSL) from the ISS [Amateur Radio on the International Space Station (ARISS) - QSL Card] for successfully decoding the Slow Scan Television (SSTV) Image of the Russian Cosmonaut- (Mikhail Kornienko) from the ISS.

Also, the Ground station successfully tracked and received QSL Card from the Japanese SPROUT and HORYU-IV Satellites and has tracked many other satellites that pass over the Sub-Saharan region.

In September, 2015 Engineers from NASA with ANU students successfully installed SUN PHOTOMETER as part of NASA Aerosol Robotic Network (AERONET). The AERONET ground system and its operating facilities will help measure the atmospheric aerosol column.

This technology implementation and environmental research is first of its kind in the West African Region and it facilitates ground based data acquisition which helps to validate other satellite-based aerosol measurement.

On the 3rd June 2017 @ 5:07pm GMT, GhanaSat-1, a Cube Satellite developed by students of ANU, was successfully launched to space [the International Space Station] at the Kennedy Space Centre LC-39A by the SpaceX Falcon-9. On July 7, 2017 @ 9:05am Coordinated Universal Time (UTC) the GhanaSat-1 cube satellite was deployed to orbit, to start its operation. It was deployed from the ISS through the JAXA JSSOD deplorer.

The Ghana Space Science and Technology Institute (GSSTI) at the University of Ghana is working closely with the Massachusetts Institute of Technology (MIT)-USA in to design and build small communication and positioning satellites.

Mr. Chairman, Ghana is therefore privileged to be part of this Committee and we are hopeful that the outcome of this meeting will be very beneficial to our country's development.