

REPUBLIC OF BOTSWANA

REMARKS

BY

HIS EXCELLENCY, DR. MOKGWEETSI E.K. MASISI PRESIDENT OF THE REPUBLIC OF BOTSWANA

ON THE OCCASION

OF THE OFFICIAL LAUNCH OF THE BOTSWANA SATELLITE GROUND STATION (BOTSWANA SAT-1 PROJECT)

VENUE: BOTSAT 1 GROUND STATION

DATE: 29TH **NOVEMBER** 2022

- Director of Ceremonies;
- Honourable Dr. Douglas Letsholathebe, Minister of Education and Skills development;
- Honourable Thulagano Segokgo, Minister of Communications, Knowledge and Technology;
- Dr Seja Maphanyane, Acting Chairperson of the Botswana International University of Science and Technology Council;
- Professor Otlogetswe Totolo, Vice Chancellor of the Botswana International University of Science and Technology and your team;
- Other Vice Chancellors here present and your teams;
- Senior Government Officials;
- Scientists and Students;
- Distinguished Guests;
- Members of the media fraternity;
- Ladies and Gentlemen;

A very good morning to all of you!

- 1. In 12 September 1962, the then President of the USA John F Kennedy gave a stirring and inspiring speech at Rice University in Houston Texas, underlining the undercurrents of the space race between the United States and the Soviet Union. His promise to Americans was to send a manned flight to the moon. Back then 45 satellites orbited the earth helping ocean liners with critical information to navigate a safer course through reliable weather updates. Seven years later, in July 1969, the astronomic cost of the project was rewarded when the astronauts returning from the Apollo Mission, were welcomed back in the fanfare and glare reserved only for national heroes, by the adoring and cheering crowds of Chicago and New York, as well as other cities in the USA. "A giant leap for humankind", "an act of faith and vision".
- 2. Some of us would be forgiven for thinking to themselves that, right now, at this, Botswana International University of Science and Technology (BIUST), this historic occasion marking the official launch of the **Botswana Satellite Project Ground station**, is a bridge too far akin to a wishful thinking or a pipe dream.
- 3. *Ke kopa gore ba le bapileng nabo le ba sikinye,* and please whisper to them: Parts are assembled! The construction of the ground communication station is completed. The commissioning of the major component of the Botswana satellite project, which is the ground communication station, **is taking place right now, right here in Palapye today in your presence exactly 1556hrs!**

- 4. We certainly have turned a corner since the Botswana Satellite (Botsat1) project was kick started in December 2020. According to the records of the United Nations Office for Outer Space Affairs (UNOOSA), at the end of January 2022, there were over eight thousand satellites circling the earth of which around five thousand are active. The ground station will immediately communicate with other active orbiting satellites before the launch of Botswana's own satellite in 2023 under the Botsat1 project. This is a project that draws its inspiration from the aspirations of the National vision 2036 and is set to actualize the reset agenda from the one that is heavily reliant on resource to the one reliant on knowledge.
- 5. To the BIUST scientists, members of faculty, staff, and students, you have collectively contributed to the successful launch of the ground communication station. I am aware that the project will require full commitment and selfless dedication from your institution. It will be especially demanding as this is our first ever practical attempt to build and launch a satellite in space. It is my fervent hope that you will all stay the course for the rest of the journey ahead which journey is endless.
- 6. Ladies and Gentlemen, this is indeed an ambitious project that we should be proud of as our country is joining other countries that are already participating in space technology. I am informed that Botswana will now be among a few African countries that have been able to launch at least one satellite into space, reflecting our quest to find innovative solutions to the challenges that our country is facing.

- 7. Globally the exponential growth of space science and technology (SST) which covers a broad array of programme elements has had a significant impact on people's lives. This has reached the point where our future prosperity depends profoundly on the understanding and knowledge of our planet Earth and the nation's ability to access the tools of space technology that are increasingly becoming a fundamental prerequisite to economic and social development.
- 8. Space Science and Technology (SST) has accordingly been recognised in Africa as instrumental to driving the Knowledge Economy. Overburdened by the relics of slavery and colonial legacy, bound in endless battles with disease outbreaks and outbreak of conflict, Africa has missed out on successive waves of industrial revolutions. Something needs to give, and the bold size of our dream as a nation should be equal to the opportunity that is on the horizon.
- 9. We cannot afford to miss out on the 4th and 5th Industrial Revolution with the promise it brings with regard to the range of benefits in a range of areas which are critical to our general prosperity and well-being. Strengthening the national capacity in Space Science and Technology (SST) accordingly provides the possibility of dealing with many of the nation's developmental challenges, which will bring considerable economic and societal opportunities and benefits to Botswana. It will also create a significant improvement in the daily lives of we the people of Batswana.
- 10. Ladies and Gentlemen, the origins of Space Science in Botswana can be traced back in time when astronomy formed a part of everyday

life. During the day, the position of the Sun in the sky and the shadows it cast on the ground were used to tell time. At night, stars and constellations were observed, named and used for direction and as an indication of the time of the year that guided the planting and harvesting of crops.

- 11. Over the last decade Space Science and Technology in Botswana has started to take root nationally and is currently identified with several projects and initiatives being undertaken there at BIUST and at the University of Botswana (UB). These are in the areas of Astronomy and Astrophysics, Planetary Science, Satellite Technology and Remote Sensing. In addition, satellite remote sensing usage and expertise is being utilized in Botswana by telecommunications companies, the Police, the Military as well as departments including agriculture, mapping, weather forecasting and search for underground water. Botswana's international involvement in SST is also evident through partnership involvement in projects such as the Square Kilometer Array (SKA), and the hosting of a telescope as part of the African Very Long Baseline Interferometry Network (AVN) also located here in BIUST.
- 12. I am pleased to note that BIUST is currently the lead coordinating institution in Botswana among satellite data core user group institutions which also include UB, Botho University, Limkokwing University and Botswana University of Agriculture and Natural Resources. I encourage you to conduct more of the technical workshop on satellite data utilization similar to the one jointly organised in August 2022, by the Botswana Digital and Innovation

Hub (BDIH) and one of our international partners in the satellite and space technology area, Planet Labs led by my very good friend Professor Will Marshall whom I met in Davos, *fa ke ntse ke tsamaya*. I wish to express my appreciation to the partners, especially the European Union who funded the workshop on satellites for space science and technology in Africa jointly with the University of Bologna, Italy in November 2021.

- 13. Ladies and Gentlemen, by its nature, this project demands that we work in close cooperation with other countries especially in the SADC region and Africa as a whole. Government will therefore work with other Governments to ensure that this project is not only successful but is also sustainable and that it will serve its rightful purpose.
- 14. The Government of Botswana has adopted a strategic, focused and proactive approach to Satellite Technology to realise its full potential opportunities and benefits for the country. The Strategy is based on building national human capacity and technical expertise in the following seven core programme areas:
 - a) Satellite Communication;
 - b) Space Industry Ground Operations;
 - c) Space Science Downstream Applications;
 - d) Earth Observation;
 - e) Cyber Infrastructure;
 - f) Space Science Education; and
 - g) Research and Development.

- 15. The above activities will lead to the creation of new employment opportunities particularly high value jobs as well as improve diverse aspects of everyday life, within the vision 2036 and the Reset Agenda of the Botswana Government. The key benefit areas will receive substantial improvements and this will include:
 - a) Communication systems;
 - b) Food security and sustainable agriculture;
 - c) Land stewardship;
 - d) Public safety;
 - e) Resource management;
 - f) Infrastructure and Transport management;
 - g) Environmental management;
 - h) Industrial development;
 - i) Export oriented products and value-added services;
 - j) Sustainable urban and rural development;
 - k) Water resource management; and
 - I) Education, research, innovations and applications.
- 16. Ladies and Gentlemen, the satellite project comes at an opportune time as our country is embarking on a journey that will eventually transform our economy, as said, from resource-based to a knowledge-based economy as espoused in our National Vision 2036 and committed to by my government as a quest for elections in 2019. So allow us to take this in chunks, next in 2024, till 2036 when we shall develop yet another vision. It is particularly noteworthy that the project places emphasis on important sectors of our economy, as

already mentioned, which are the key drivers for socio-economic development in our communities, especially in the rural areas.

- 17. My Government is fully committed to projects that promote Botswana as a digital society and as such we continue to invest in the Information, Communication and Technology sector to facilitate our transition to a digital economy. Let me therefore underscore that this satellite project has not been kick-started by chance.
- 18. Satellite Technology development will also help to ensure in future that our people have easier access to public services. As you are aware, there is a growing demand for e-services across Government and the private sector. To this extent, Government has introduced initiatives such as e-learning, e-commerce, e-health, e-minerals, among others that will improve the delivery of quality services through digitization across Government departments.
- 19. I am therefore truly delighted that many of the promises made under my leadership, particularly those related to ICT, innovation and digitization, including this satellite project are coming before your very eyes to fruition. I am confident that this Satellite project, on completion will take this country to the next higher level of development. You and I should be alive to witness these developments.
- 20. I want to conclude my remarks by encouraging our scientific and research institutions, academics as well as individual researchers to work for the common goal of ensuring the success of this satellite

project. I further urge the promoters of this project to reach out to those institutions and countries with better experience and the technical know-how outside Botswana to ensure that this project is a success. And I can pledge to you here and now, that I will be right on your side, I will find the money to fund this project.

21. With these few remarks, I now have the honour to declare the Botswana Satellite Ground communication station officially launched and opened!

I thank you all for your attention. **PULA!**