UNITED NATIONS COMMISSION ON SCIENCE AND TECHNOLOGY FOR DEVELOPMENT (CSTD), twenty-third session (virtual meeting) Geneva, 10-12 June 2020

Discussion on "Exploring space technologies for sustainable development and the benefits of international research collaboration in this context"

Statement submitted by

H.E. Mr. Khaled Abdel Ghaffar Minister of Higher Education and Scientific Research Egypt

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Excellencies, The Chair of the Commission on Science and Technology for Development (CSTD), United Nation

Honorable Bureau Members

Distinguished official representatives of the member states Ladies, and Gentlemen;

Good Morning

- It is my great pleasure to join you in this important meeting of the Commission on Science and Technology for Development (CSTD)" and present Egypt vision and strategy and best practices towards exploring space technology for sustainable development.
- The world has paid much attention and interest to space science and technology, hence Egypt recognized the importance of space science and technology in our life and therefore developed our own national strategy and developed an action plan to strengthen our capacity of infrastructures and human capitals. We understand that international and regional partnerships is essential to ensure high level of capacity to enable achieving the strategic goals, we have made strong pond with some partners such as France, China, Ukraine, Japan and Germany.
- Egypt started using earth observation since 1970s, when established a remote sensing center, which was transformed into a national authority for remote sensing and space sciences (NARSS), affiliated to the Ministry of Higher Education and Scientific Research, which was the cradle of the

space program in the last 20 years. NARSS is mandated to promote research and development and innovation of space applications for the benefit of our society.

- We recently declared the Egyptian Space Agency (EgSA) under the patronage of HE the president of Egypt. It is dedicated to space technology and look after all the coordination of space activities.
- Egypt strengthened its space infrastructure and launched series of low orbit Earth Observation satellites such as Egyptsat-1, Egyptsat-A that support national and regional applications to achieve sustainable development goals.
- Egypt Rely on the earth observation data in most of the thematic areas for sustainable development; for example:
 - o updating national land use and land cover map on yearly basis,
 - monitoring agricultural land, crop status, crop yield and health for food security,
 - monitoring marine environment and recording oil pollution for an early warning system,
 - monitoring land ownership and land transformation from agriculture land to urban settlements,
 - o monitoring floods and its hazards on land use and land cover,
 - monitoring air pollution and dust storms and their direct and indirect impact on human health,
 - management of natural resources including mineral resources and create linkage with industrial plans.

- Egypt launched series of telecommunication and broadcasting satellites including NileSat series to cover north Africa with broadcasting channels. Recently, we launched communication satellite of TibaSat for ensuring broadband and internet connectivity to all the citizens and to connect the unconnected.
- Egypt has the oldest astronomy institute since 18th century with optical telescope that had supported selecting the appropriate location for landing the first man on the moon, this institute is establishing the state of the art technology of telescope to track satellites and explore deep space.
- Egypt developed national space strategy that foster the cooperation between universities, research institutes and public to maximize the value of space technology for societal benefits. The strategy enabled to strengthen the university curriculum in engineering, information technology, science and geography to develop the capacity in all related disciplines to space science and technology and their applications.
- Egypt has funding envelops that support research and innovation in space science and technology, and launch regular calls for partnership between academia, research institutes and industry (at least 10 partners) to develop small satellites. In response to these calls, 2 can satellites were launched successfully in cooperation with Japan. This promotes research and development, strengthen the capacity and foster international cooperation and partnerships.
- Ministry of Higher Education and Scientific Research has issued some new legislations that encourage and promote research and innovation and

Public Private Partnership (PPPs), with incentives to establish spin off companies in governmental research institutes and universities.

- Egypt is a partner in most of the regional multi-lateral funding schemes such as PRIMA to promote joint regional research and applications for the Mediterranean region and making the research and innovation to respond to our regional challenges.
- Egypt has involved in many bi-lateral partnerships with developed and developing countries to encourage joint research, development and innovation for cross fertilization, sharing knowledge and facing our national, regional and global challenges.
- On continental arena, Egypt was led the coordination with the African Union Commission to develop the continental African Space Policy and Strategy to achieve the socio-economic development and the African Agenda 2063 for the welfare of the African people. The Policy and Strategy are focusing on the four areas of:
 - Earth Observation (EO)
 - Satellite communication
 - Navigation and positioning
 - Astronomy and space science
- To implement these policy and strategy, Egypt was successfully declared in February 2019 to host the African Space Agency, which will coordinate and mange the African space activities and implement the four thematic areas of the space policy and strategy for the benefits of African

citizens. Egypt allocated 10M+ USD for the kick off of the agency; currently we are in the process of establishing the permanent headquarters building of the African Space Agency and setting up the implementation plan and allocate the fund for the operation of at least the first 5 years.

• We understand how much space technology is costly, therefore international partnership and cooperation will be an essential component to leverage African capacity and infrastructure for mutual benefits.