

Agenda Item 5: General Exchange of Views**Mr Chair and Distinguished delegates,**

Indian Space programme was initiated in the 1960s by a committed group of Indian physicists of independent India, with the overarching goal of utilizing modern technology for the betterment of human life. It is now sixty years since the first rocket roared into the skies from the Indian soil on 21st November 1963, heralding the entry of India into the club of space faring nations. Over this past six decades, India has come a long way from its sounding rocket experiments, steadily improving in the technological front. India attaches great importance towards the activities and outcomes of UN COPUOS's work over the years and we ensure our full commitment towards the successful functioning of the committee.

Mr Chair,

India has achieved many significant milestones and noteworthy feats in the last one year. Chandrayaan-3 mission has demonstrated the capability of the nation in undertaking a complex space mission, with its successful and precise soft landing near the southern polar region of the moon on August 23, 2023. The mission has demonstrated end-to-end capability in safe landing and roving on the lunar surface. The honorable Prime Minister of India has named the landing site of Chandrayaan -3, now approved by International Astronomical Union (IAU), and the landing site will be henceforth known as 'Statio Shiv Shakti'. Different payloads onboard the lander and rover module conducted multiple in-situ experiments.

The success of Chandrayaan-3 mission also stands as a testimony for the India's international cooperation with major space agencies. The lander carries an auxiliary instrument, named as 'Laser Retroreflector Array (LRA)' from NASA, which could serve as a long-term geodetic station and a location marker on the lunar surface with its eight Retroreflectors. Ground stations of ISRO located in Brunei, Indonesia & Mauritius; European Space Agency, NASA and Swedish Space Corporation (SSC) located in Chile have provided required support for tracking, deep space communication and navigation.

Mr Chair,

Launched aboard the PSLV C57, Aditya-L1 is a space based solar observatory placed in a halo orbit around the Lagrange point-L1 of the Sun-Earth system. Advanced sensors on the Plasma Analyser Package Payload (PAPA) onboard have successfully detected the impact of the coronal mass ejections. The observations made by PAPA emphasizes its effectiveness in monitoring space weather conditions and its capability to detect and analyse the solar phenomenon. Further, other vital payloads such as the Solar Ultraviolet Imaging Telescope (SUIT) & Visible Emission Line Coronagraph(VELC) have provided valuable insights on understanding the solar activity.

Adding our pursuit in the field of scientific explorations, XPoSAT, launched onboard PSLV C58, is a space based polarization measurement of X-ray emission from celestial sources.

Mr Chair,

Towards the Indian human space flight program, Gaganyaan, we are making steady progress. A new test vehicle was developed and it was used to demonstrate the in-flight performance of Crew Escape system (CES) and its safe recovery. Human rating of the cryogenic engine has also been carried to add confidence to the Gaganyaan program. The first batch of the selected Indian astronauts, for the Gaganyaan programme, termed Gaganyatris, was announced in February 2024.

While appreciating the works of the Working Group on the Long Term Sustainability of Outer Space, India has been actively contributing to the work of the committee and as well implementing the guidelines for the safe and sustainable use of the outer space. The terminal stage of PSLV, converted into an experimental platform, POEM, has effectively been utilized by numerous start-ups, universities and NGEs for carrying out experiments in space. The third POEM mission onboard PSLV C58 was de-orbited from the 650km to 350km orbit facilitating its early re-entry and was passivated to remove residual propellants to minimise any accidental breakups. POEM-3 thus demonstrates a practically zero debris mission.

The Hon'ble Prime Minister of India has set ambitious targets for the country, significant among them being, establishing an Indian Space Station by 2035 and Indian landing on the surface of the Moon by 2040. The country is gearing up towards achieving these targets.

India's intent to achieve debris free space mission by all Indian space actors, governmental and non-governmental by 2030 was announced in the annual meet of IADC, held at Bengaluru in April 2024. India also invites all other state space actors to join this initiative.

India also hosted the 4th edition of Space Economy Leaders Meeting (SELM) in Bengaluru in July 2023, under the India's G20 presidency. The theme was: Towards a New Space ERA (Economy, Responsibility, Alliance). SELM recognized the role of space economy within the global economy and agreed to discuss the potential to include the item "space economy" on future G20 agenda, in order to formulate and adopt conducive policy regimes across the nations for enhanced space industry level collaborations.

India has also proposed to launch a 'G20 Satellite Mission for Environment and Climate Observation'. The satellite would be built by India, would host payloads from the G20 nations and the data from the satellite would be made available for the global community. Further, India plans to build a joint satellite with Mauritius for Earth Observation applications, that shall assist in technical capacity building of the country's engineers towards small satellite building & operations.

Mr. Chair,

With opening up of the space sector in the country, India has been actively supporting and nurturing the development of the NewSpace actors of the country. A regulatory mechanism for authorization and monitoring of space activities by non-governmental entities has been put in place, through the Indian National Space Promotion and Authorization Centre (IN-

SPACe), which ensures authorization of space activities being undertaken. The Indian Space Policy – 2023 provides further certainty with regards to the roles and responsibilities of various stakeholders.

The Indian Institute of Space Science and Technology, IIST, a premier space technology institute of the country, has recently entered into domain of service as a reliable ground station tracking system, providing opportunities for universities and space start-ups.

Mr Chair,

India is happy to inform that work has started towards establishment of the second space port of the country at Kulasekharapattinam in Tamil Nadu state, which shall provide a direct southward launch capability. The spaceport shall cater to the launch of small satellite launch vehicles, including those from commercial players,

Another significant milestone was unraveled when India Space Research Organisation celebrated the 20th anniversary of its remote sensing satellite, IRS-P6 in space on October 2023. IRS-P6 has been providing invaluable data for applications ranging from agriculture, forestry, disaster management and sustainable planning.

Mr Chair,

Right from its inception, the Indian Space programme has always believed in the mantra of international cooperation in the space exploration and research and in the peaceful use of space. India looks forward to a productive session of COPUOS this summer and work towards safe, sustainable and peaceful use of outer space.

Thank you, Mr. Chair and distinguished delegates.