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NEW YEAR MESSAGE - 2022

A very good morning to all and a warm wishes to you and your families for a happy, healthy and a prosperous new year!

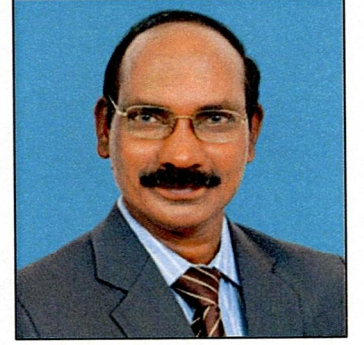
As 2021 has come to an end, I am sure all of us are looking forward for a bright and eventful year.

The beginning of the new year is an apt occasion for reflecting on the achievements of the previous year. During the previous year, the impact of the lockdowns was still evident and activities had to be carried out while following the COVID guidelines and protocols of the government.

There is a feeling that very little happened in ISRO during 2021. That feeling is primarily due to less number of launches. However, as Chairman, ISRO, I am extremely proud that all of you have made very significant contributions in continuing the operational missions, conceiving many new missions, undertaking many technology development initiatives, and planning for the next decade of space activities.

Over and above that, Government of India successfully implemented the space sector reforms to expand the space sector within India. ISRO's more than five decades of hard work in growing the space activities in India has brought the Nation to an inflexion point, wherein we can leap-frog into a glorious future. This is intended to ensure that India retains its leadership and meaningful position in the global space Industry.

ISRO engineers have also shown their social empathy by undertaking many initiatives to mitigate COVID induced shortage of medical equipment and supplies through innovative design solutions. The ventilators and oxygen concentrators designed and proto tested by ISRO engineers are now being produced by Industry. Even on the cultural front, ISRO engineers have shown their mettle by successfully organizing the Aarohan event, which not only showcased talent but also provided the right kind of creative avenue to keep morals high in these times. Kudos to all of you!



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Last year, we had two missions in which one was a dedicated commercial mission by NSIL. GSLV F10 mission failed due to cryogenic stage anomaly. A national level failure analysis committee was constituted for the same and the committee has identified the root cause and given its recommendations. Necessary design changes are being incorporated to improve the robustness of concerned systems.

In the space application domain, we completed Geospatial energy map of India, Desertification and Land Degradation Atlas of India, dissemination of hydro-informatics products under National Hydrology Project and support towards disaster management activities.

In the Navigation domain, I am glad to inform you all that more than 30 NavIC-enabled mobile handsets have been released in the Indian market. Also, all the major mobile chipset manufacturers have released NavIC-enabled chipsets.

In the communication domain, 17 communication satellites are providing 292.5 transponders and 25 GBPS of high throughput capacity. CMS-01 satellite has replaced GSAT-12 which was approaching the end of planned mission life.

ISRO's science missions are hugely exciting and motivating for the youth. ISRO has carved its own niche position in this domain even globally. Our Chandrayaan-2, Mars Orbiter Mission and Astrosat are operational and has resulted in hundreds of prestigious peer reviewed journal publications. The hardware in loop test of Aditya L1 spacecraft is completed, accommodation studies for XpoSat in SSLV are completed and ISRO has delivered the S band SAR payload to NASA for NISAR mission. Chandrayaan-3 design changes incorporating and testing has seen huge progress. The mission could be launched by middle of next year.

I am extremely glad to inform you that three new space science missions are in the pipeline namely, DISHA, a twin aeronomy satellite mission, Venus mission and ISRO-CNES joint science mission TRISHNA. TRISHNA mission is meant for accurate mapping of land surface temperatures. This mission will be the benchmark for providing temperature data at best resolution and repeatability even globally.

India's flagship GAGANYAAN project has completed the design phase and has entered into the testing phase. Tests are in progress for human rated L110 Vikas engine, Cryogenic stage, Crew escape system motors and service module propulsion system. S200 motor has been realized for ground test too. Main parachute drop test has also commenced. Astronauts have completed the generic spaceflight training abroad. The Indian leg of mission specific training has also commenced. A

comprehensive training plan has been worked out and state-of-the art accommodation cum training facility has been established for the same. There is a directive to launch the first unmanned mission before 75th anniversary of India's independence and all the stake-holders are putting their best effort to meet the schedule. I am sure that we will be able to meet this target.

Now coming to the most important Space Sector Reforms. As you are aware that GoI has already approved the same for expanding the footprint of Space industry not only within India but also globally. Towards this many policies have been revised after due process to accommodate the reforms. They are Space Based Communication Policy, Remote Sensing Policy and Technology Transfer Framework. Many new policies are also in the pipeline and will be approved as per due process.

The impact of space sector reforms is already becoming visible. IN-SPACE, the nodal agency for promotion of space based activities is formed and its Chairman is appointed. NSIL which is space sector CPSE has already started working on its expanded mandate of being a manufacturer and operator of space systems on demand based model. Lot of progress is there in NSIL towards launch vehicle manufacturing, providing launch services, satellite building, providing satellite services, as well as ground segment mission support activities and technology transfer. GSAT-24 is the first demand driven satellite. It has submitted many techno-commercial proposals to launch satellites for both domestic and international customers. In-fact, NSIL has turned profitable in its very first year of operation and has remitted 154 % of its paid-up capital to GoI.

Today, when we look forward, we not only look forward to the next year but to the next decade. Sound planning is essential for the next decade given that the space industry is changing very rapidly and service demands from space industry is ballooning.

I am glad to inform that for we have formulated the decadal plan for the Indian Space Programme for the country as a whole. The decadal plan is formulated by keeping the ethos of space sector reforms to enable the national space sector which includes ISRO, academia and private sector. This is to foster all-round growth in operational missions, launch services, science missions, technology demonstration missions and new technology development initiatives. Effort has also been made to map the future space sector activities with growth drivers and disruptive technologies. Emphasis has been paid to identify and develop the technologies of the future especially the disruptive technologies which may make the existing space systems obsolete.

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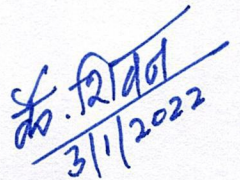
If you look at the immediate task at hand this year, we have many missions to execute. Some of these are launch of EOS-4 and EOS-6 on board PSLV. Launch of EOS-02 on board maiden flight of SSLV. Many test flights for Crew Escape System of Gaganyaan and Launch of the first unmanned mission of Gaganyaan. In addition, we also have Chandrayaan-03, Aditya L1, XpoSat, IRNSS and technology demonstration missions with advanced indigenously developed technologies on-board. I am sure that with your continued cooperation, support and enthusiasm, we will be able to achieve all the targets.

The last few months were a lull period for ISRO, due to Corona. However, all indicators point towards the next imminent wave. All of us have to prepared and protect ourselves both at the personnel level as well as at the institutional level to safeguard the ongoing programmes and activities. All the Centre Directors have in the past mitigated the aftereffects of previous pandemic wave by excellent planning, devising monitoring mechanism and working protocol. There is a need to tighten our shoe laces in the same manner to face the next wave. I am sure that with the cooperation from all of you, we will be ready for facing any eventuality.

On the first working day of the new year, let me once again wish you and your family members, a very happy and prosperous new year as well as best wishes for all future endeavours. The whole nation appreciates and acknowledges your magnificent accomplishments, achievements as well as numerous personal sacrifices. It is you people who have made ISRO, one of the best organizations to work for.

Thank you all and Jai Hind.

Dated: January 3, 2022


(कै. शिवन / K. Sivan)