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Policy Support Initiative: The Role of Space Industry in Achieving Sustainable Development Goals (SDG) for 75 Students Satellites Mission

by Pramitha Ramaprakash, CTO, 75 Satellites, and Founder, Transend Satellite Technologies LLP and Gautham Balasubramanya, CSO, 75 Satellites, and Senior Research Fellow, The Institute of Productivity

1) 75 Students Satellites Mission industry's possible contributions to SDGs

75 Satellites is an initiative aimed at facilitating collaboration between academia and (technology-based) which will also serve to underpin sustainable development – supporting ecosystem growth and creating skilled jobs, which in turn will assist in poverty alleviation and reducing inequality. The space industry represents a growing sector of private sector industry in both emerging and developed countries. In emerging countries, private sector space-related enterprises account for significant employment growth. There is a similar situation in relation to high-skilled employment in developed countries, with a particular emphasis on improved education and employment for the young and for women.

The small satellites developed and launched within the 75 Students Satellites Mission can make contributions to the UN's strategic development goals by, for example, :

SDG 1: No Poverty

Satellite technology can help better forecasting of natural disasters and allow agencies to better coordinate subsequent aid initiatives.

SDG 2: Zero Hunger

An effective tracking system can inform farmers about the condition of their cattle and their pasture - improving food security.

SDG 3: Good Health & Well-being

Using aerial imaging and mapping can help prevent vector diseases, and can help monitor traffic conditions, reducing the number of road fatalities.

SDG 4: Quality Education

The process of implementing and executing the mission will have significant impact on the quality of education – and education facilities.

SDG 5: Gender Equality

The space industry is relatively 'gender-blind' – it simply promotes talent wherever it lies.

SDG 6: Clean Water & Sanitation

Satellite technology provides enhanced information on the availability and flows of water.

SDG 7: Affordable & Clean Energy

Satellite technology enhances the efficiency of solar forecasting enabling more effective solar energy supply.

SDG 11: Sustainable Cities & Communities

A number of the above factors can combine to help design more habitable and more sustainable urban environments.

2) 75 Satellites Growth: Prospects and Challenges



The stakeholders – Government, Academia and Industry are all keen to see growth for the Space Industry following the 2020 Pandemic crisis. Recent development such as the Space X manned flight have ramped up interest in the sector and recent discussions and data from New Space India, New Space Hub, SpaceUp and Global Space Watch, all point to continued growth. This will have impact on education and on job creation globally since supply chains in the sector are multi-national. Some of these impacts will be in relatively short timescales. Spin-off benefits to other sectors mean that in the medium to longer-term we will see impact in the agritech, agribusiness, marine-tech, marine-business, aero, defence, manufacturing and education sectors.

The 75 Students Satellites Mission is relying on world-class manufacturing industry to develop and deliver cubesat services. These value-add services are the vital in creating and exploiting data, one of the most important capital items in the growing sectors of the digital society and digital economy. As a matter of course, general technological development will assist in closing connectivity and engagement gaps that currently prevent sections of society from participating fully. Cubesats are extremely effective solution where terrestrial technologies are too costly, and they help promote cross-border digital services and a more open society. They also offer effective backup services for current ageing terrestrial services.

Of course there are hurdles to overcome. Trans-national legal issues are not being fully discussed at national or regional level – let alone the legal issues when working ‘out of this world’. There is a need for a coherent space regulatory framework to create simplified internal and trans-national markets for space-related products and services. This needs international co-operation to avoid distortion – or worse – by the very large, commercial players or even unscrupulous national governments.

3) 75 Satellites Terms of Reference

The Engineer Your Satellite Programme (EYS) aims to facilitate the development of cubesat capability with the goal of achieving safe, reliable, and cost-effective access to and from low-Earth orbit. EYS will be partnering with Spacotech entities to provide technical enhancements capable of supporting a 75 Small Satellite System Network Constellation which can facilitate efficient communications, effective monitoring and enabling of telemetric evaluations and contributions to the mitigation effort of disaster management, forestry, fisheries, agriculture, security and governance solution systems.

Spacotech entities will support the awareness programmes for new entrants at interested Engineering Educational Institutions (EEIs) or Universities, monitor the progress of students’ satellite projects through the services of Faculty Members/Students of the host EEIs/ Members of 75 Satellites and through the services of associated research personnel.

SpaceTech entities will support the Projects by offering their intellectual products and services to help meet project objectives (within time and cost constraints) and will support each other in organising national and international conferences, congresses, symposia, seminars, workshops, training programs, competitions and other such events.



4) Terms and Conditions

To achieve the 75 Students Satellites Mission, the programme coordinators will:

- provide strategic guidance to member entities to support the implementation of the mission and the tactical related targets.
- make recommendations to member entities/stakeholders on key priorities, as well as potential actions
- review progress towards targets, drawing on contributions from participants and from key, observing stakeholders
- provide insights and guide the global review and follow-up for 75 Satellites.
- promote and undertake joint advocacy activities.
- monitor, advocate for and mobilize resources including adequate financing, at the national and international level.

75 Satellites is uniquely positioned to develop and support low earth orbit launch facilities: engineering and manufacturing capacity, and most critically, Global Launch Initiatives (GLI). 75 Satellites provides a collaborative platform for academia, industry, education and governmental agencies to provide LEO launch technologies for commercial and defense applications. The priority is to organize industry partners to establish and operate a cubesat launch facility and command centre.

Globally. 75 Satellites will organize and facilitate interaction with governmental entities, including regional, and international agencies that will be involved with licensing, operational, and launch facilities and command operations.

4) Membership Type

Business Development Focus

Newsletter – Complimentary Subscription

Networking – with Entities

Calendar – Agri-Tech, Agri-Business, Marine-Tech, Marine-Business, Aerospace & Defense Events

E-Mail Alerts – Opportunities & Events

Legislative Updates – State and Central

Representation – On Industry Boards and Associations

Directory Listing – On-Line and Print with Logo of 75 Satellites

Inclusion – in Trade Missions and Trade Visits

Admission – to Workshops, Round-tables and Forums

Updates – Industry Statistics, Trends and Analysis

Participation – in Value Chain Events

Discounts – select Professional Development Seminars, Conferences, and Congresses

Strategy Sessions – Strategic Leadership of Productivity and Performance Development

Assistance – Press and Public Relations

Referrals – Business Development Opportunities

Institute of Productivity



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Consulting Focus

Facilitated Networking - Targeted Introductions

Mentoring - Strategic Leadership of Productivity and Performance Development

Plus, all of Business Development Focus

For enquiry to determine which membership level is appropriate for your needs please contact: Mr. Gautham Balasubramanya

gautham@instituteofproductivity.com

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