

BUSINESS INNOVATION SYMPOSIUM (E6)
Public/Private Human Access to Space - Supporting Studies (2)

Author: Mr. K.R. Sridhara Murthi
NIAS, India, krsmurthy09@gmail.com

Dr. Mukund Kadursrinivas Rao
National Institute of Advanced Studies (NIAS), India, mukund.k.rao@gmail.com

INDIAN SPACE ECOSYSTEM - NEW IMPERATIVES FOR INDUSTRY

Abstract

India's investments in space activities were mainly driven by the public policy and there had been tremendous growth in support for space technology developments and applications through investments by the government. Indian space activities are also in recent times diversifying into scientific missions to the Moon, Mars and possibly human spaceflight activities in future. As an integral strategy, space industry development and promotion had been pursued from the early stages of India's space programme mainly to derive support for its missions and also for creating necessary social and economic impacts.

The entry of India's private sector into services which are based on space systems more than a decade ago was a major turning point that opened up possibilities for both growth and extension of value chain by industry. Although certain policy initiatives for expanded industry roles in the fields of satellite communications and remote sensing data and their applications were taken up more than a decade ago, the overall ecosystem of Indian space market presents a scenario of significant gaps between demand and supply. In the backdrop of economic development over past decade and the aspirations of relatively young population for improved governance and an inclusive growth, major opportunities are opening up for space sector to expand its roles. How this opportunity can be utilised for renewal of national space industry is a pertinent issue to be explored.

Taking cognisance of the need for sustained growth of investments and participation of private sector in diverse branches of space activities, the paper analyses the ecosystem of space industry and space markets in India, the impacts created hitherto and their potentials for future. This ecosystem analysis deals with diverse aspects like investments, risk management, technology transfers and safeguards, capacity building regulatory issues and international collaborations. In this context it identifies diverse issues of policy which need to be addressed. The analysis is structured to deal with different segments of value chain and also potential new areas of business such as user equipment and applications in the field of satellite positioning where India plans to establish a regional system apart from its cooperation with global systems. The paper also suggests possible improvements for further development and sustenance of India's space industry, the opportunities that are in the horizon and the measures aiming at the harmonious development of public and private sectors.