Paper ID: 13491
oral
student

19th SYMPOSIUM ON SMALL SATELLITE MISSIONS (B4)
13th UN/IAA Workshop on Small Satellite Programmes at the Service of Developing Countries (1)

Author: Mr. Muhammad Shadab Khan
Department of Aeronautical Engineering,Babu Banarasi Das National Institute of Technology and Management,Lucknow, Sweden, shadab_kh4u@yahoo.com

SMALL SATELLITE MISSIONS- PROVIDING COST EFFECTIVE SMART SOLUTIONS TO THE SOCIETY IN DEVELOPING COUNTRIES

Abstract

Satellites have become an integral part of our life and it's very difficult to believe how life would be without satellites in the present scenario. Our daily life activity has become dependent on the role of satellites. In terms of developing countries those are marching ahead towards becoming developed, small satellites missions could prove a boon for the economy of these countries as most of them are not able to afford for big satellites missions either due to the cost incurred or the unavailability of potential space program. In terms of dense populated countries like India and China where it's difficult to explore the resources in every nook and corner using the big satellites, the small satellites can play a crucial role in exploring the resources by focusing the satellites in a particular region of the country. This will reduce both the dependence on big satellites and benefit the local people in that particular region to make better utilization of their local resources. Considering this importance several academic institutions in India are working ahead in this direction. These institutions are being provided support and finance from the nation's space agency "Indian Space Research Organization" to design and fabricate the small satellites with only one or two scientific instruments onboard. Jugnu, SRMSAT were the first two small satellites in this series to be launched into space by ISRO last year and presently three other projects are being undertaken. These small satellites are not only helping in creating curiosity amongst the students but also helping in the proper utilization of the local resources that in some case can't be achieved through big satellites. India which have great physical resources and are not explored due to large area and remote locations the deployment of small satellites in the particular focused areas can help in exploring them. Not only in terms of physical resources but the deployment of these small satellites for the purpose of telemedicine in a particular region can provide great relief to people living in those remote areas and villages where there is unavailability of good hospitals and medical services so that they can receive proper medical advice from the medical experts from eminent medical institutions like AIIMS, PGI and others at the right time instead of rushing to bigger cities. This will not help in saving money and time but will also help in providing immediate medical treatment.