

CAPACITY BUILDING OF SPACE EMERGING COUNTRIES: IAA STRATEGY FOR THE NEXT DECADE.

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ABSTRACT:

The International Academy of Astronautics (IAA) was created in 1960 as an independent international community of leading experts (1700 from 89 nations) and recognized by the United Nations in 1996. Because of its composition and membership based on highly competitive election, its leadership through a Board of Trustees composed of high ranking Trustees (7 Heads of space agencies) and its six commissions which encompass all aspects of space activities, the Academy offers the missing forum where the best experts in all domains be they scientists, engineers, technicians, specialists of space policy and space law can meet, know each other and exchange opinions.

The Academy has promoted international cooperation in space since its creation together with championing subjects such as small satellites. Space is certainly a dedicated area for installing stable and sustainable development and obviously homemade small satellites are privileged access to space (150 small satellite projects identified). Based on this observation the Academy is promoting the subject in many space emerging countries, in Latin America, Africa, Middle East and Asia Pacific.

The first step of the IAA contribution program to capacity building is to help preparing a study led by local experts to define technically and economically a project (currently more than 35 studies in preparation). The second step is to engage experienced volunteer IAA experts for space technology to devote time and efforts to bridge from the study to the local realization or more simply from the desire to the implementation. The team is assigned to be the point of contact to organize in-situ seminars, teaching, assistance to specifications, lab installations and methodological support. The last step is the assistance to ground station, mission control, data reception and data distribution, interpretation and the support for cooperation/partnership for ground applications.

Developing small satellite missions is now within the means of many nations. They provide enormous opportunities: to do more with less, to address local and global needs, to focus the development of the technical infrastructure of a country, to generate greater involvement of local and small industry, to reduce risk in the use of space, and to finally constitute a powerful tool for capacity building of a country