

SPACE ACTIVITY AND SOCIETY (E5)
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CAPACITY BUILDING THROUGH ICT: THE SATCOM ELEMENT

Abstract

Abstract— This paper describes issues related to Capacity Building initiatives in developing countries through a wide, multi-competence approach that are often accompanied by a number of challenges.

I. INTRODUCTION The European Space Agency is actively promoting the use of Information and Communications Technology to enable the adoption of e-Applications for the benefit of the less advantaged regions in the world called Capacity Building. This is typically done through structured initiatives or projects, characterised by their own specific set of objectives, scopes and allocated resources. As the target areas are typically characterised by an underdeveloped telecommunications infrastructure, satellite communications can effectively provide a useful mean in the process of facilitating the development of Capacity Building initiatives in order to bring quickly and reliably broadband telecommunications access. Therefore Capacity Building is identified as a fundamental opportunity to develop and promote the benefits that space can bring to society. A number of Capacity Building initiatives have been launched in the past by several organisations to provide different applications, serve different user communities and address various geographical areas. It is now widely recognised that to be effective such initiatives have to be carried out following a holistic approach, in which technological, operational and strategic aspects must be tackled taking into account the social, cultural, financial and organisational contexts in which they are targeted. Failure to do that would result in show-case exercises unable to move beyond episodic demonstrations of rather limited impact. The need to tackle Capacity Building initiatives through a wide, multi-competence approach is often accompanied by a number of challenges. Beside the difficulty to find a multidisciplinary project team with strong competences and motivation, solid experience and right balance of the different components, the target environment is often characterised by logistical difficulties, lack of local expertise, critical social conditions and unstable political environments which are very difficult to deal with. The Netherlands organisation for applied scientific research is developing this approach in the form of a Reference Model, together with a Satcom operator and multiple NGO's. The model is aimed at different actors and phases of ICT4D projects, and will be presented on a high level in the remainder of this paper. Finally, the authors describe challenges that are met and have been dealt with.