

REGULATION OF SATELLITE REMOTE SENSING & GIS APPLICATIONS IN PAKISTAN

Shah Murad

Federal Urdu University of Arts, Science and Technology, Karachi, Pakistan.

Email: shahmurad@live.com

Abstract: Application of Satellite Remote Sensing and Geographic Information System has played a significant role in the socio-economic development of Pakistan especially, by serving as efficient means to address various challenges ranging from environmental protection to management of natural disasters. Further, with advances in space technology, Pakistan is increasingly looking towards application of modern technology for the betterment of society and achieving sustainable development. Pakistan Space and Upper Atmosphere Research Commission (SUPARCO), the national space research commission, has been using application of Satellite Remote Sensing and Geographic Information System since 2000. However, at present, there is no law in Pakistan to regulate the uses and applications of such advance technology. The United Nations' Treaties and Principles on space law provide a fundamental legal basis for national space legislation by imposing a significant responsibility on every Contracting State to fulfill its international Treaty obligations. Pakistan is party to all five Treaties and Principles of the United Nations on space law but has not incorporated any Treaty into municipal law to regulate space activities at national level. One of the UN's Principles, the Principle Relating to Remote Sensing of the Earth from Outer Space, is particularly dealing with the uses and applications of Satellite Remote Sensing which set out guideline for its regulation. In fact, the existing legal system in Pakistan does not cope with the emerging issues and regulatory challenges involved in the application of advance space technology. In order to respond legal challenges faced by the public and commercial entities, it imperative to enact space legislation to better serve Pakistan's space sector. This paper provides an overview of legal aspects of Satellite Remote Sensing and Geographic Information System in the context of privacy, liability, rights, intellectual property, contract, and data sharing.

Keywords: Remote Sensing, GIS, SUPARCO, Space Law, National Legislation.