

## 52nd COLLOQUIUM ON THE LAW OF OUTER SPACE (E8)

Legal challenges to Earth observation programs with particular emphasis on developing countries (5)

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DEVELOPMENT OF SPACE LAW AND SCIENCE FOR EARTH OBSERVATION: IMMENSE ALL ROUND BENEFITS AWAITING MANKIND, ESPECIALLY FOR THE DEVELOPING COUNTRIES

**Abstract**

1. This paper will discuss some major issues of peace and economic prosperity involved in the development of space law for earth observation from space. It will further analyse the immense benefits being obtained today in the world by earth observation or remote-sensing spacecraft, and great potential for global economic benefits in the near future by international cooperation by states. Indeed, the world seems on the brink of great evolution of integrated knowledge about nature that space exploration and space observation has produced for humankind. There has been considerable integration of space law and science in finding out and developing these new goals for mankind that seeks harmony with nature, and peace and economic progress by international cooperation. The paper will discuss the development of space law for remote-sensing by the United Nations as is contained in the 1986 'Principles Relating to Remote Sensing of the Earth from Outer Space'. It will refer to state practice on this subject of remote-sensing, and need for further development of space law in this field that will benefit world community, as also the developing world in particular, including SAARC countries.

2. The methodology used will be to survey important global reports from the UN including UNISPACE III Conference 1999 Documents for Space Benefits, World Bank, space-going states, including India, in regard to uses that space observation has been put so far for enormous planning of natural resources and protection of environments of planet earth. I recall the important remarks made in the 60th IAC 2009 Conference by Madam Anne-Marie Mainguy, Vice-President Technical Activities. She says space gives us chance to explore new worlds. It is a valuable vantage point from where to look back on the Earth and understand more closely the working of our fragile planet. She has referred to Keplers laws that describe that planets orbit in circles in harmony with cosmic frontiers. And mankind belongs to one planet earth. To this observation of Kepler, we may add the views from Prof. Albert Einstein who was keen to look for hitherto undiscovered laws of nature to find reality for causation and phenomena of nature. We may in course of time, and due to new knowledge from space sciences, discover new laws of nature that seem an exciting possibility, such as finding out the ecological balance of planet earth. Therefore I see that space observation makes us study the overall global ecology, and plan for a prudent and ecological economic living in harmony with nature and natural resources. New economic goals may be needed not necessarily based on growth rate alone, but combined with wisdom of humankind, and suited to the ecology of mother earth.

International cooperation between states and peoples will help global community to make optimum uses of natural resources and discover values of joyful living and human understanding. Fragmentation of knowledge is now a matter of past, that divided global society unnecessarily. An ecological and scientific understanding of earth systems and cosmic frontiers as provided by space exploration and space observation will usher a new order of unity of science, and unity of world society. In this global endeavour of international cooperation states will only gain. There is nothing to lose. H.G.Wells said long ago cooperation between nations will only increase adventure, not reduce it. I am personally excited by prospects of global cooperation in earth observation, that will help overcome in due course the current global economic meltdown. The mother earth has enough resources for global human needs, as Mahatma

Gandhi said, but not for unnecessary human greeds. Space law is a very important part of international law. It is also called by leading jurists like Prof. Myres McDougal from Yale Law School as global community expectations. Therefore, space law is transforming global society through new expectations of hope for peace and prosperity of humankind.