34th IAA SYMPOSIUM ON SPACE POLICY, REGULATIONS AND ECONOMICS (E3)
International cooperation in using space for sustainable development: Towards a 'Space2030' agenda (1)

Author: Dr. Anne-Sophie Martin
Sapienza University of Rome, Italy

PROTECTING WILDLIFE AND BIODIVERSITY: THE SIGNIFICANT ROLE OF EARTH OBSERVATION DATA

Abstract

Space applications play an increasing role in the achievement of the Sustainable Development Goals, especially in the case of the SDG 15 "Life on land". Indeed, space-based technologies, including Earth observation, contribute to improve the well-being on Earth namely through the monitoring of ecosystems, the protection of wildlife and the awareness about deforestation and desertification. In this context, the 2030 Space Agenda should underscore the fact that the use of Earth observation data contributes very positively to the sustainable use of terrestrial ecosystems, to the preservation of natural habitats, and to the limitation of the biodiversity loss. Earth's surface provide vital habitats for millions of species, and the protection of biodiversity is essential for ensuring and guaranteeing our live on Earth. The paper deals with Earth observation data, as crucial tools, to preserve and to protect wildlife and biodiversity with a focus on Africa. In fact, Earth observation information and data are very useful for monitoring land surface taking into account the risks of poaching across the Continent. With this in mind, the paper highlights the importance of international cooperation in the field considering notably the partnership between NASA and Kenya to manage and track living animals through the Digital Earth Africa system or the AfriGEO community. Lastly, the paper addresses the data policy of Earth observation programmes such as Landsat and Copernicus in order to demonstrate the valuable benefit that the access to and the use of Earth Observation application and data represent for the preservation of wildlife and biodiversity which are part of our common heritage. These elements are of particular relevance for the 2030 Space Agenda which should emphasise the necessity to ensure a free and open access to Earth observation satellite data in order to deliver decision-ready products enabling policy makers, scientists, private sector and civil society to address environmental challenges and the preservation of 'Life on Earth'.