

# **NEWPLATFORMS – Unconventional Platforms for Remote Sensing**

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## **KEYWORDS :**

## **ABSTRACT:**

During the 105th Meeting of the EuroSDR Science and Steering Committees in Madrid, Spain in the Autumn of 2004, the NEWPLATFORMS project was accepted. It aims at inventarising new and unconventional platforms for remote sensing (as opposed to the traditional ones – manned aircraft or satellites).

A second objective was to make a compare the capability for remote sensing of these platforms to the traditional ones. This activity is in line with one of the resolutions passed during the XXth ISPRS Congress in Istanbul, Turkey during the Summer of 2004, which states that “An inventory and performance investigations of Unpiloted Aerial Vehicles should be undertaken”. In the time that has passed since, the use of unmanned platforms to provide remotely sensed data has become quite widespread. These systems have important advantages during data collection: since they do not need to accomodate a pilot, they can be designed for missions that cannot be achieved by commonly used manned aircraft (e.g. flight duration of over 24 hours).

The paper deals with a classification method for the different platforms; it discusses the properties of a number of representative platforms and their applications. From this, the reader will see that these systems do not replace the existing platforms, but complement them. The low-flying helicopter types are used for affordable high-resolution local observation of small areas, the high-altitude types will serve as local geostationary platform, able to provide short update cycles (e.g. for crop monitoring and forecasting, for crisis management or for traffic monitoring). A possible synergy with developments in telecommunication (where stratospheric platforms are considered as a means to improve network access) is discussed.