Committee on the Peaceful Uses of Outer Space

Information furnished in conformity with the Convention on Registration of Objects Launched into Outer Space

Letter dated 8 January 2004 from the Head of the Legal Department of the European Space Agency to the Secretary-General

In conformity with the Convention on Registration of Objects Launched into Outer Space (General Assembly resolution 3235 (XXIX), annex), to which the European Space Agency has acceded, the European Space Agency has the honour to transmit information on the launching of the SMART-1 satellite (see annex).
Annex

Registration of objects launched into outer space*

Small Missions for Advanced Research in Technology satellite 1 (SMART-1)

Name of space object: SMART-1

Name of launching authority: European Space Agency

Date of launch: 27 September 2003

Location of launch site: Kourou, French Guiana

Orbital parameters: SMART-1 will enter the Moon’s orbit by the beginning of 2005, after 16 months of flight. During the first phase, it will slowly increase the apogee of its elliptical orbit around the Earth until it reaches Lagrange point no. 1 (the equilibrium point between the gravitational fields of the Earth and the Moon). From there it will progressively enter into decreasing orbits around the Moon. Scientific observations of the Moon are planned to start at the beginning of 2005.

General description of the space object: SMART-1 is the first of the European Space Agency’s Small Missions for Advanced Research in Technology (SMART). It is heading to the Moon using solar-electric propulsion and carrying a battery of miniaturized instruments. As well as testing new technology, SMART-1 will make the first comprehensive inventory of key chemical elements in the lunar surface. It will also investigate the theory that the Moon was formed following the violent collision of a smaller planet with the Earth, 4.5 billion years ago.

Frequency plan:

Earth-to-space: 2,058.15 MHz (telecommand/tracking)
7,194.7 MHz (telecommand/tracking, experimental)

Space-to-Earth: 2,235.1 MHz (telemetry/tracking)
8,453 MHz (telemetry/tracking, experimental)
32,121 MHz (telemetry, experimental)

Nominal lifetime: 2 years

* The registration data are reproduced in the form in which they were received.