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**Committee on the Peaceful
Uses of Outer Space****Information furnished in conformity with the Convention
on Registration of Objects Launched into Outer Space****Note verbale dated 3 December 2004 from the Permanent Mission
of France to the United Nations (Vienna) addressed to the
Secretary-General**

The Permanent Mission of France to the United Nations (Vienna) presents its compliments to the Secretary-General of the United Nations and, in accordance with article IV of the Convention on Registration of Objects Launched into Outer Space (General Assembly resolution 3235 (XXIX), annex), has the honour to submit information on space objects launched by France during the period from 1 January to 30 June 2004 and supplementary information on France's previously launched space objects (see annex).



Annex

A. Registration data on space objects launched by France between 1 January and 30 June 2004*

Data on space objects launched between 1 January and 30 June 2004

Registration number	Date of launch	Launch site	Type of launcher	Basic orbital characteristics				General function of space object	Remarks		
				Nodal period (minutes)	Inclination (degrees)	Apogee (km)	Perigee (km)		Ariane launch number	Satellite launched	State/organization
2004 006 B	2 March 2004	Kourou, French Guiana	Ariane 5		5.687		393	Ariane 5 storable propellant stage	V158	Rosetta	European Space Agency
2004 007 B	15 March 2004	Baikonur, Kazakhstan	Proton	1 436	1.3	35 811	35 761	EUTELSAT W3A telecommunications satellites			
2004 025 C	29 June 2004	Baikonur, Kazakhstan	Dniepr	99	98.2	715	715	Detection of Electro-Magnetic Emissions Transmitted from Earthquake Regions (DEMETER) satellite. The DEMETER satellite is intended for scientific and technological use. Its main purpose is to analyse any signals associated with geophysical phenomena, such as earthquakes or volcanic eruptions, using instruments for detecting the Earth's electromagnetic field. It is also used for in-orbit validation of a number of new technologies, such as high-performance telemetry, low-cost mass memory, a photon initiation system with a pyrotechnic component and a global positioning system (GPS)-based system to demonstrate the feasibility of autonomous orbit control. It has a nominal lifetime of one year and an extended lifetime of two years. Additional information: Frequency plan: Earth-Space 2 033.2 MHz (Telecommand) Space-Earth 2 208 MHz (Housekeeping telemetry) 8 253 MHz (Scientific telemetry)		Centre national d'études spatiales	

Note: France registers European Telecommunications Satellite Organization (EUTELSAT) satellites.

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

B. Additional information furnished by France in conformity with article IV, paragraph 2, of the Registration Convention

1. French satellites in an inclined orbit and still operational

<i>Registration number</i>	<i>Satellite</i>	<i>Type of orbit</i>
1990-005A	SPOT 2 Earth observation satellite	800 km Sun-synchronous
1993-031B	ARSENE amateur radio satellite	36,000-17,000 km, 5.7° inclined orbit
1995-033A	Helios 1A space-object technique and technology research satellite	625 km polar orbit
1998-017A	SPOT 4 Earth observation satellite	800 km Sun-synchronous
1999-064A	Helios 1B space-object technique and technology research satellite	625 km polar orbit
2002-021A	SPOT 5 Earth observation satellite	800 km Sun-synchronous
2002-021B	Idefix amateur radio satellite	800 km polar orbit
2004-025C	DEMETER scientific satellite	715 km polar orbit

2. French satellites in geostationary orbit and still operational, with approximate orbital position as at 30 June 2004

<i>Registration number</i>	<i>Satellite</i>	<i>Approximate orbital position as at 30 June 2004</i>
1991-003B	EUTELSAT II F2 telecommunications satellite	48° E
1991-083A	EUTELSAT II F3 telecommunications satellite	21.5° E
1991-084A	TC 2A telecommunications satellite	3° E
1995-016B	HotBird TM 1 telecommunications satellite	13° E
1995-067A	TC 2C telecommunications satellite	5.2° W
1996-044B	TC 2D telecommunications satellite	8° W
1996-067A	HotBird TM 2 telecommunications satellite	13° E
1997-049A	HotBird TM 3 telecommunications satellite	13° E
1998-013A	HotBird TM 4 telecommunications satellite	13° E
1998-056A	EUTELSAT W2 telecommunications satellite	16° E
1999-018A	EUTELSAT W3 telecommunications satellite	7° E
2000-019A	SESAT 1 telecommunications satellite	36° E
2000-028A	EUTELSAT W4 telecommunications satellite	36° E
2000-052A	EUTELSAT W1 telecommunications satellite	10° E
2001-011A	Eurobird TM 1 telecommunications satellite	28.5° E
2001-042A	Atlantic Bird TM 2 telecommunications satellite	8° W
2002-035A	Atlantic Bird TM 3 telecommunications satellite	5° W
2002-038A	HotBird TM 6 telecommunications satellite	13° E
2002-040A	Atlantic Bird TM 1 telecommunications satellite	12.5° W
2002-051A	EUTELSAT W5 telecommunications satellite	70.5° E
2003-043A	e-Bird TM telecommunications satellite	33° E
2004-008A	W3A telecommunications satellite	7° E

3. French satellites still in orbit but no longer operational

<i>Registration number</i>	<i>Satellite</i>
1965-096A	A1 experimental satellite
1966-013A	D1 experimental satellite
1967-011A	Diadème 1 experimental satellite
1967-014A	Diadème 2 experimental satellite
1973-107A	Auréole 2 experimental satellite
1974-101A	Symphonie 1 experimental telecommunications satellite
1975-072A	COS B scientific satellite
1977-077A	Symphonie 2 experimental telecommunications satellite
1977-108A	Meteosat 1 meteorological satellite
1978-071A	GEOS 2 scientific satellite
1981-094A	Auréole 3 scientific satellite
1984-081A	TC 1A telecommunications satellite Two reorbiting manoeuvres effected on 7 and 8 September 1992 from orbital position 11° W. Final orbit: apogee: 42,595 km, eccentricity: 1.3×10^{-3} , perigee: +375 km GEO orbit; drift 5.3°/day to west. Satellite finally ceased operation on 9 September 1992.
1985-035B	TC 1B telecommunications satellite Attitude and orbit control system supply breakdown on 15 January 1988 (last orbital position: 5° W); the satellite is rotating around its principal inertia axis Z; oscillation orbit about 75° W.
1986-019A	SPOT 1 Earth observation satellite. In conformity with the Inter-Agency Space Debris Coordination Committee (IADC), deorbiting manoeuvres were effected in November 2003 to lower the satellite's perigee from 800 to 594 km in order to restrict its life in space to approximately 18 years.
1987-078B	ECS 4 telecommunications satellite
1988-018B	TC 1C telecommunications satellite Two reorbiting manoeuvres 12 hours apart were effected on 9 February [1996] from orbital position 1° E. Final orbit: apogee: 42,830 km, eccentricity: 0.01; perigee: 42,400 km, or +235 km above the GEO orbit; drift 6°/day to west. Satellite finally ceased operation 13 February 1996.
1988-063B	ECS 5 telecommunications satellite
1988-098A	TDF1 live television satellite Last orbital position: 19° W. Semi-major axis increased by 300 km. Satellite configured in solar pointing mode and ceased operation in September 1996.
1988-063A	TDF2 live television satellite Last orbital position 36° E. Semi-major axis 42,440 km; shift 3.9° to west. Satellite ceased operation on 1 June 1999.
1990-079B	EUTELSAT II F1 telecommunications satellite
1991-050E	SARA experimental microsatellite
1992-021A	TC 2B telecommunications satellite Satellite was reorbited 188 km above the GEO orbit from orbital position 47° E and finally ceased operation on 23 June 2003.
1992-052C	S80T technological satellite
1993-061A	SPOT 3 Earth observation satellite
1993-061B	Stella scientific satellite
1995-033B	Cerise space-object technique and technology research satellite

C. Data provided by France in conformity with article IV, paragraph 3, of the Registration Convention on space objects that are no longer in Earth orbit

1. Objects registered by France between 1965 and 1984

<i>Registration number</i>	<i>Date of launch</i>	<i>General function of space object</i>	<i>Atmospheric re-entry</i>
1965 096 C	26 Nov. 1965	Non-functional launcher elements	25 Mar. 1967
1966 013 C	17 Nov. 1966	Non-functional launcher elements	4 Dec. 1967
1966 013 D	17 Nov. 1966	Non-functional launcher elements	11 Sept. 1967
1966 013 E	17 Nov. 1966	Non-functional launcher elements	25 Aug. 1967
1966 013 F	17 Nov. 1966	Non-functional launcher elements	16 July 1991
1966 013 H	17 Nov. 1966	Non-functional launcher elements	1 Mar. 1968
1966 013 J	17 Nov. 1966	Non-functional launcher elements	28 May 1981
1966 013 K	17 Nov. 1966	Non-functional launcher elements	22 Nov. 1982
1966 013 L	17 Nov. 1966	Non-functional launcher elements	21 Nov. 1978
1966 013 M	17 Nov. 1966	Non-functional launcher elements	15 Mar. 1974
1966 013 N	17 Nov. 1966	Non-functional launcher elements	8 Nov. 1988
1966 013 P	17 Nov. 1966	Non-functional launcher elements	23 Apr. 1989
1966 013 Q	17 Nov. 1966	Non-functional launcher elements	22 Jan. 1989
1967 011 C	8 Feb. 1967	Non-functional launcher elements	13 Dec. 1967
1967 011 D	8 Feb. 1967	Non-functional launcher elements	3 Jan. 1968
1967 011 E	8 Feb. 1967	Non-functional launcher elements	5 Dec. 1967
1967 011 F	8 Feb. 1967	Non-functional launcher elements	12 Feb. 1968
1967 011 G	8 Feb. 1967	Non-functional launcher elements	22 June 1980
1967 011 H	8 Feb. 1967	Non-functional launcher elements	20 June 1990
1967 011 J	8 Feb. 1967	Non-functional launcher elements	8 May 1968
1967 011 K	8 Feb. 1967	Non-functional launcher elements	29 Oct. 1967
1967 011 L	8 Feb. 1967	Non-functional launcher elements	21 Apr. 1989
1967 011 M	8 Feb. 1967	Non-functional launcher elements	17 June 1980
1967 011 N	8 Feb. 1967	Non-functional launcher elements	7 Mar. 1980
1967 011 P	8 Feb. 1967	Diadème 1 satellite elements	27 Aug. 1980
1967 011 Q	8 Feb. 1967	Diadème 1 satellite elements	12 Nov. 1982
1967 014 D	15 Feb. 1967	Non-functional launcher elements	16 Sept. 1968
1967 014 E	15 Feb. 1967	Non-functional launcher elements	12 Nov. 1982
1967 014 G	15 Feb. 1967	Non-functional launcher elements	20 Nov. 1979
1967 014 H	15 Feb. 1967	Non-functional launcher elements	2 Aug. 1981
1967 014 J	15 Feb. 1967	Non-functional launcher elements	19 Jan. 2002
1967 014 K	15 Feb. 1967	Non-functional launcher elements	30 Aug. 1991
1967 014 L	15 Feb. 1967	Non-functional launcher elements	19 Aug. 1991
1967 014 N	15 Feb. 1967	Non-functional launcher elements	30 Sept. 1991
1967 014 P	15 Feb. 1967	Non-functional launcher elements	10 Nov. 1991
1968 041 A	17 May 1968	Iris (ESRO 2B) scientific satellite	8 May 1971
1969 084 A	1 Oct. 1969	Aurorae (ESRO 1A) scientific satellite	26 June 1970
1970 017 B	10 Mar. 1970	Diamant launcher stage (MIKA)	9 Sept. 1974
1970 109 A	12 Dec. 1970	Peole scientific satellite	16 June 1980

<i>Registration number</i>	<i>Date of launch</i>	<i>General function of space object</i>	<i>Atmospheric re-entry</i>
1970 109 B	12 Dec. 1970	Diamant launcher stage	23 Dec. 2001
1970 109 C	12 Dec. 1970	Non-functional launcher elements	14 May 1980
1970 109 D	12 Dec. 1970	Non-functional launcher elements	20 Apr. 1979
1970 109 E	12 Dec. 1970	Non-functional launcher elements	6 Jan. 1980
1970 109 F	12 Dec. 1970	Non-functional launcher elements	30 Oct. 1976
1971 030 A	15 Apr. 1971	D2A Polaire (Tournesol) scientific satellite	28 Jan. 1980
1971 030 B	15 Apr. 1971	Diamant launcher stage	9 July 1979
1971 030 C	15 Apr. 1971	Non-functional launcher elements	15 July 1972
1971 030 D	15 Apr. 1971	Non-functional launcher elements	15 July 1977
1971 030 E	15 Apr. 1971	Non-functional launcher elements	15 Apr. 1976
1971 030 F	15 Apr. 1971	Non-functional launcher elements	3 Feb. 1977
1971 030 G	15 Apr. 1971	Non-functional launcher elements	13 July 1972
1971 030 H	15 Apr. 1971	Non-functional launcher elements	22 Mar. 1975
1972 005 A	31 Jan. 1972	HEOS A2 scientific satellite	3 Sept. 1974
1972 014 A	12 Mar. 1972	TD-1A scientific satellite	9 Jan. 1980
1972 025 B	4 Apr. 1972	SRET 1 scientific satellite	26 Feb. 1974
1977 049 A	17 June 1977	SIGNE 3 scientific satellite	21 June 1979
1984 049 B	23 May 1984	Third stage of Ariane 1	17 Mar. 1986
1984 081 C	4 Aug. 1984	Third stage of Ariane 3	29 May 1990
1984 114 D	10 Nov. 1984	Non-functional launcher element	27 Oct. 1986

Note: Ariane launcher elements that were launched between 24 December 1979 and 23 May 1984 and re-entered the atmosphere are not identified here, since these launches were declared and registered by the European Space Agency (ESA).

2. Objects registered by France between 1985 and 1992

<i>Registration number</i>	<i>Date of launch</i>	<i>General function of space object</i>	<i>Atmospheric re-entry</i>
1985 015 D	8 Feb. 1985	Non-functional launcher element	5 Apr. 1986
1985 035 C	8 May 1985	Third stage of Ariane 3	27 Mar. 2002
1985 056 E	2 July 1985	Non-functional launcher element	19 June 2003
1985 056 F	2 July 1985	Non-functional launcher element	18 Sept. 2000
1985 056 G	2 July 1985	Non-functional launcher element	11 Mar. 2002
1985 056 N	2 July 1985	Non-functional launcher element	4 May 2004
1986 019 E	22 Feb. 1985	Non-functional launcher elements	28 Aug. 1987
1986 019 VN	22 Feb. 1985	458 objects, registration numbers 1986-019E–1986-019VN, re-entered the atmosphere between 28 August 1987 and 10 February 2003	10 Feb. 2003
1987 078 C	16 Sept. 1987	Third stage of Ariane 3	21 June 1991
1987 078 D	16 Sept. 1987	SYLDA inter-satellite structure	8 Oct. 1988
1987 078 E	16 Sept. 1987	Non-functional launcher element	21 Mar. 1998
1987 078 G	16 Sept. 1987	Non-functional launcher element	22 Apr. 2002
1988 018 D	11 Mar. 1988	SYLDA inter-satellite structure	1 Feb. 1989
1988 051 D	15 June 1988	Third stage of Ariane 4	10 Nov. 1993
1988 051 F	15 June 1988	Non-functional launcher element	22 Nov. 2001
1988 063 C	21 July 1988	Third stage of Ariane 3	30 Apr. 2003
1988 063 D	21 July 1988	Non-functional launcher element	12 July 1989
1988 063 H	21 July 1988	Non-functional launcher element	30 Oct. 2002

<i>Registration number</i>	<i>Date of launch</i>	<i>General function of space object</i>	<i>Atmospheric re-entry</i>
1988 081 D	8 Sept. 1988	Non-functional launcher element	29 June 1989
1988 081 E	8 Sept. 1988	Non-functional launcher element	19 Feb. 1999
1988 081 F	8 Sept. 1988	Non-functional launcher element	18 Sept. 2000
1988 098 C	28 Oct. 1988	Non-functional launcher element	23 Apr. 1998
1988 098 D	28 Oct. 1988	Non-functional launcher element	27 June 1992
1988 098 E	28 Oct. 1988	Non-functional launcher element	5 Nov. 1994
1988 098 K	28 Oct. 1988	Non-functional launcher element	19 July 2003
1988 109 D	11 Dec. 1988	SPELDA inter-satellite structure	22 Oct. 1993
1988 109 N	11 Dec. 1988	Non-functional launcher element	7 Sept. 2002
1989 020 C	6 Mar. 1989	Third stage of Ariane 4	21 Apr. 1992
1989 020 D	6 Mar. 1989	Non-functional launcher element	22 Dec. 1992
1989 041 C	5 June 1989	Third stage of Ariane 4	13 June 1996
1989 041 D	5 June 1989	Non-functional launcher element	10 May 1992
1989 053 B	12 July 1989	Third stage of Ariane 3	29 Mar. 1994
1989 062 D	8 Aug. 2001	Non-functional launcher element	8 Mar. 1992
1989 062 N	8 Aug. 2001	Non-functional launcher element	3 Jan. 2004
1990 079 C	30 Aug. 1990	Third stage of Ariane 4	28 Aug. 1993
1990 079 D	30 Aug. 1990	Non-functional launcher element	28 Sept. 1991
1990 091 D	12 Oct. 1990	Third stage of Ariane 4	2 Oct. 1991
1990 100 D	20 Nov. 1990	Non-functional launcher element	6 Nov. 1991
1991 003 C	15 Jan. 1991	Third stage of Ariane 4	8 May 1998
1991 003 D	15 Jan. 1991	Non-functional launcher element	9 Mar. 1995
1991 003 J	15 Jan. 1991	Non-functional launcher element	22 Dec. 1997
1991 003 L	15 Jan. 1991	Non-functional launcher element	2 Aug. 2002
1991 015 C	2 Mar. 1991	Third stage of Ariane 4	10 Feb. 2002
1991 015 D	2 Mar. 1991	Non-functional launcher element	23 Nov. 1995
1991 015 K	2 Mar. 1991	Non-functional launcher element	1 June 2000
1991 050 G	17 July 1991	Non-functional launcher element	30 Jan. 2002
1992 010 C	26 Feb. 1992	Third stage of Ariane 4	14 May 1998
1992 021 F	15 Apr. 1992	Non-functional launcher element	29 Aug. 2002
1992 041 D	9 July 1992	Non-functional launcher element	1 May 2000
1992 041 E	9 July 1992	Non-functional launcher element	27 Apr. 2003
1992 041 F	9 July 1992	Non-functional launcher element	19 Mar. 2003
1992 041 H	9 July 1992	Non-functional launcher element	10 Nov. 2003
1992 041 G	9 July 1992	Non-functional launcher element	4 July 2003
1992 041 J	9 July 1992	Non-functional launcher element	18 May 2003
1992 060 C	10 Sept. 1992	Third stage of Ariane 4	20 Oct. 1993
1992 060 D	10 Sept. 1992	Non-functional launcher element	23 Mar. 1994
1992 072 B	28 Oct. 1992	Third stage of Ariane 4	28 Aug. 1994
1992 072 E	28 Oct. 1992	Non-functional launcher element	8 Aug. 1998
1992 072 F	28 Oct. 1992	Non-functional launcher element	25 May 2004
1992 072 G	28 Oct. 1992	Non-functional launcher element	27 Mar. 2001
1992 072 H	28 Oct. 1992	Non-functional launcher element	24 Sept. 2000

3. Objects registered by France between 1993 and 2003

<i>Registration number</i>	<i>General function of space object</i>	<i>Atmospheric re-entry</i>
1993 048 D	SPELDA inter-satellite structure	20 May 2000
1993 061 J	Non-functional launcher element	19 Oct. 2000
1993 066 B	Third stage of Ariane 4	17 Apr. 1994
1993 073 D	SPELDA inter-satellite structure	7 July 1998
1993 078 C	Third stage of Ariane 4	27 Jan. 1994
1993 078 D	SPELDA inter-satellite structure	4 Aug. 2001
1994 040 D	SPELDA inter-satellite structure	18 May 2003
1994 049 C	SPELDA inter-satellite structure	10 Oct. 1998
1994 065 C	Third stage of Ariane 4	22 Jan. 1996
1994 065 D	Non-functional launcher element	24 Nov. 1998
1994 070 B	Third stage of Ariane 4	20 Mar. 2004
1995 016 D	SPELDA inter-satellite structure	29 Dec. 1998
1995 023 B	Third stage of Ariane 4	13 Nov. 1995
1995 044 B	Third stage of Ariane 4	13 Jan. 1996
1995 067 D	SPELDA inter-satellite structure	13 Jan. 2002
1996 002 D	SPELDA inter-satellite structure	4 Apr. 2002
1996 007 B	Third stage of Ariane 4	7 June 2000
1996 015 B	Third stage of Ariane 4	20 Oct. 2000
1996 035 B	Third stage of Ariane 4	30 Sept. 1996
1996 040 D	SPELDA inter-satellite structure	25 Mar. 2001
1996 044 D	SPELDA inter-satellite structure	1 Jun. 2000
1996 055 B	Third stage of Ariane 4	2 Apr. 2000
1996 063 D	SPELDA inter-satellite structure	21 Aug. 2003
1997 009 B	Third stage of Ariane 4	12 Dec. 2000
1997 016 D	SPELDA inter-satellite structure	19 June 2000
1997 031 B	Third stage of Ariane 4	4 Mar. 2003
1997 049 D	SPELDA inter-satellite structure	21 Apr. 2004
1997 071 C	Third stage of Ariane 4	6 Aug. 1998
1997 071 D	SPELDA inter-satellite structure	21 Oct. 1998
1997 075 C	Third stage of Ariane 4	7 Nov. 2000
1997 075 D	SPELDA inter-satellite structure	27 Aug. 2001
1997 083 B	Third stage of Ariane 4	3 May 2004
1998 006 C	Third stage of Ariane 4	5 Mar. 2004
1998 006 D	SPELDA inter-satellite structure	6 Dec. 2001
1998 013 B	Third stage of Ariane 4	8 Apr. 1998
1998 024 C	Third stage of Ariane 4	1 Feb. 2001
1998 024 D	SPELDA inter-satellite structure	18 Feb. 2001
1998 052 B	Third stage of Ariane 4	26 Oct. 1998
1998 056 D	SPELDA inter-satellite structure	18 Nov. 1999
1998 063 C	Third stage of Ariane 4	31 Oct. 1998
1998 063 D	Mini-SPELDA inter-satellite structure	6 Sept. 1999
1998 070 B	Third stage of Ariane 4	12 July 2004

<i>Registration number</i>	<i>General function of space object</i>	<i>Atmospheric re-entry</i>
1999 009 D	SPELDA inter-satellite structure	4 Sept. 2003
1999 046 B	Third stage of Ariane 4	6 June 2003
1999 052 B	Third stage of Ariane 4	11 Dec. 1999
1999 059 B	Third stage of Ariane 4	27 Jan. 2000
2000 002 B	Third stage of Ariane 4	16 Apr. 2004
2000 076 B	Third stage of Ariane 4	25 Jan. 2002
2000 081 D	Ariane 5 storable propellant stage	31 May 2002
2000 081 E	SYLDA inter-satellite structure	29 June 2002
2001 002 B	Third stage of Ariane 4	11 Jan. 2001
2001 024 B	Third stage of Ariane 4	9 Oct. 2001
2001 042 B	Third stage of Ariane 4	11 Aug. 2002
2002 007 B	Third stage of Ariane 4	1 July 2002
2002 027 B	Third stage of Ariane 4	1 Nov. 2003
2002 041 B	Third stage of Ariane 4	4 Dec. 2002
