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(ITU) للاتصالات الدولي الاتحاد في والمحفوظات المكتبة قسم أجزاء الضوئي بالمسح تصوير نتاج (PDF) الإلكترونية النسخة هذه والمحفوظات المكتبة قسم في المتوفرة الوثائق ضمن أصلية ورقية وثيقة من نقلأً.

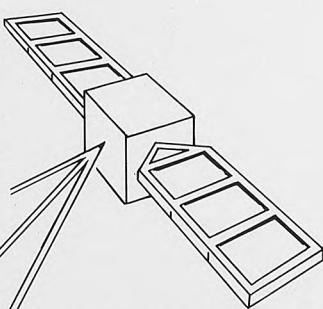
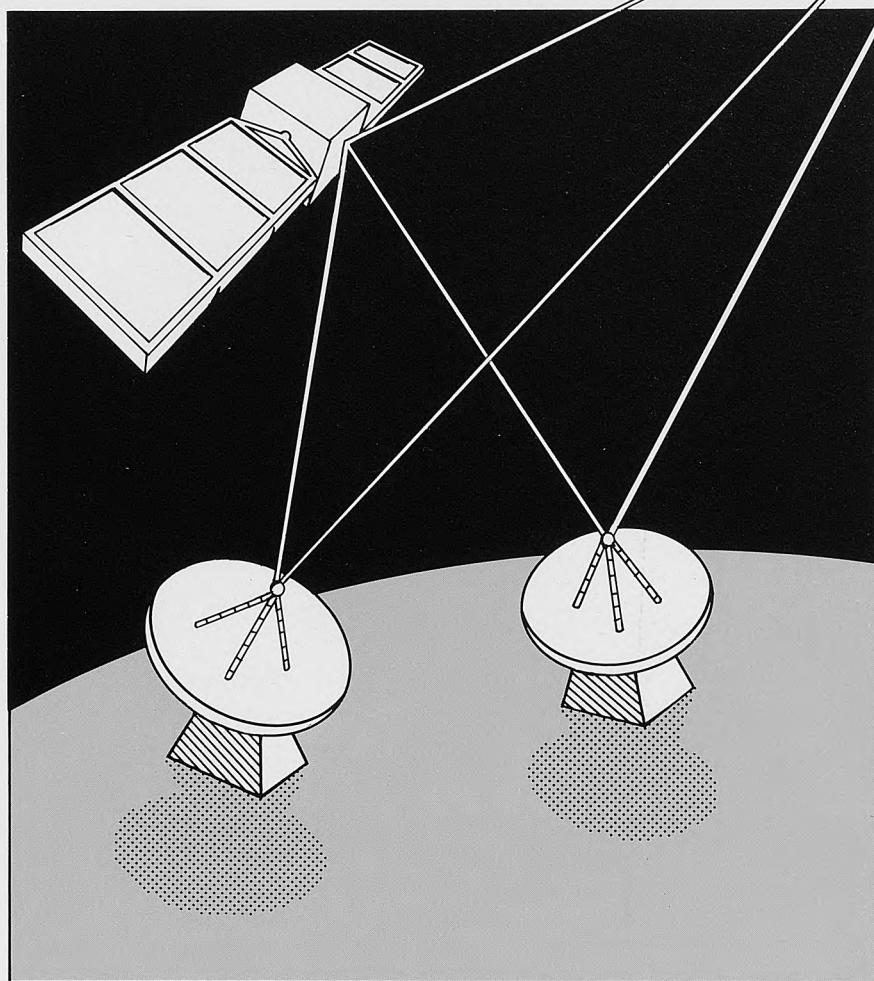
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Table
of artificial satellites
launched in
1987



REDUCING THE COST OF SATELLITE NETWORK COORDINATION



Logica's interference management system captures, stores and analyses information from the IFRB's weekly circulars. It enables radio interference between pairs of geostationary satellites to be assessed as a rise in link noise temperature (Appendix 29 $\Delta T/T$) and can also calculate carrier to interference ratios (based on CCIR 455-4).

In the area of network coordination, we also provide services concerning the effective use of computer and communications equipment, ranging from consultancy on methods of enhancing productivity to the turnkey supply of automation facilities.

logica

Logica Space and Defence
Systems Limited
64 Newman Street
London W1A 4SE
United Kingdom
Telephone +44 1 637 9111
Telex 27200

Logica has supplied interference management systems to various clients including Intelsat, the International Telecommunications Union, the European Space Agency's Research and Technology Centre and EUTELSAT.

This list includes all artificial satellites launched in 1987. It was prepared from information provided by telecommunication administrations of ITU Member countries, the Committee on Space Research (COSPAR), national space research organizations, the International Frequency Registration Board (IFRB) of the ITU, and from details published in the specialized press. The data concerning the orbit parameters are the initial orbital data. Fragments or stages of rockets left over from launching operations and placed in orbit with the various spacecraft have not been included.

Code name Spacecraft description	International number	Country Organization Site of launching	Date	Initial orbital data			Frequencies Transmitter power	Observations
				Perigee (km) Apogee (km)	Period (min)	Inclination (degree)		
Meteor-2 (15) 2750 kg	1987-1-A	USSR (Plesetsk)	5 Jan.	950 973	104 82.5		137.85 MHz	Meteorology. Equipment for obtaining global pictures of cloud cover
Cosmos-1811	1987-2-A	USSR (Baikonur)	9 Jan.	181 367	89.7 55			Recovered on 13 February 1987
Cosmos-1812	1987-3-A	USSR	14 Jan.	648 677	97.8 82.5			
Cosmos-1813	1987-4-A	USSR	15 Jan.	208 387	90 72.8			
Progress-27 modified <i>Soyuz</i> without the descent section; 7 tonnes at launch	1987-5-A	USSR (Baikonur)	16 Jan.	189 280	88.9 51.6			Expendable supply craft. Docked with <i>Mir</i> orbital station on 18 January 1987. Decayed on 25 February 1987
Cosmos-1814	1987-6-A	USSR	21 Jan.	775 815	100.7 74			
Cosmos-1815	1987-7-A	USSR	22 Jan.	345 558	93.5 50.7			
Molnya-3 (31) 3 axis stabilized; 1500 kg	1987-8-A	USSR (Plesetsk)	22 Jan.	473 40 800	736 62.8	5.9-6.2 GHz (reception) 3.6-3.9 GHz (emission)		Television and multichannel radiocommunications
Cosmos-1816	1987-9-A	USSR	29 Jan.	979 1024	104.9 82.9			
Cosmos-1817	1987-10-A	USSR	30 Jan.	192 224	88.4 51.6			Decayed on 31 January 1987
Cosmos-1818	1987-11-A	USSR	1 Feb.	790 810	100.7 65			
Astro-3 (Ginga)	1987-12-A	Japan Institute of Space and Astronautical Science (Kagoshima)	5 Feb.	528 593	95.9 31.2	400.0; 2280.5 MHz (telemetry)		High-energy astrophysics research; large-area X-ray counter, all-sky X-ray monitor and g-ray burst detector

Soyuz-TM2	1987-13-A	USSR (Baikonur)	5 Feb.	103 120	88.3 87.1		Crew: Y. Romanenko (commander) and A. Laveikin (flight engineer). Docked with the <i>Mir/Progress-27</i> orbital complex on 7 February 1987. Returned to Earth on 30 July 1987
Cosmos-1819	1987-14-A	USSR	7 Feb.	197 254	88.7 72.8		Recovered on 18 February 1987
USA-21	1987-15-A	United States Department of Defense	12 Feb.		88.3 87.1		
Cosmos-1820	1987-16-A	USSR	14 Feb.	185.9 273.2	88.8 64.8		Decayed on 5 March 1987
Cosmos-1821	1987-17-A	USSR	18 Feb.	983 1029	105 82.9		
MOS-1 (Momo-1) 740 kg	1987-18-A	Japan National Space Development Agency (Tanegashima)	19 Feb.	903 917	103 99.1	136.112 MHz 1 W 2220.00 MHz 0.4/0.035 W 8150; 8350 MHz 5 W 1702.4848 MHz 0.056 W	
Cosmos-1822	1987-19-A	USSR	19 Feb.	205 331.5	89.5 73		Decayed on 5 March 1987
Cosmos-1823	1987-20-A	USSR	20 Feb.	1497 1538	116 73.6		
Cosmos-1824	1987-21-A	USSR	26 Feb.	177 370	89.7 67.2		Decayed on 22 April 1987
GOES-7	1987-22-A	United States (Eastern Test Range)	26 Feb.	33 363 36 084	1382.1 0.6		Meteorology, international search and rescue
Progress-28 modified Soyuz spacecraft without the descent section; 7 tonnes at launch	1987-23-A	USSR (Baikonur)	3 March	191 272	88.8 51.6		Expendable supply vehicle. Docked with the <i>Mir</i> orbital station on 5 March 1987 and decayed on 28 March 1987

Code name Spacecraft description	International number	Country Organization Site of launching	Date	Initial orbital data			Frequencies Transmitter power	Observations
				Perigee (km) Apogee (km)	Period (min) Inclination (degree)			
Cosmos-1825	1987-24-A	USSR	3 March	649 677	97.7 82.5			
Cosmos-1826	1987-25-A	USSR	11 March	206 401	90.3 72.9			Recovered on 25 March 1987
Cosmos-1827	1987-26-A	USSR (Plesetsk)	13 March	1393 1409	113.8 82.6			Six satellites launched by the same launcher
Cosmos-1828	1987-26-B			1382 1409	113.7 82.6			
Cosmos-1829	1987-26-C			1408 1412	114.0 82.6			
Cosmos-1830	1987-26-D			1405 1409	113.9 82.6			
Cosmos-1831	1987-26-E			1388 1409	113.8 82.6			
Cosmos-1832	1987-26-F			1398 1409	113.9 82.6			
Cosmos-1833	1987-27-A	USSR	18 March	851 878	101.9 71			
Raduga-20 3-axis stabilized; 5 tonnes; solar panels	1987-28-A	USSR	19 March	35 967 in geostationary-satellite orbit	1445 1.3	5.7-6.2 GHz (reception) 3.4-3.9 GHz (emission)		Television and multichannel radiocommunications
Palapa-B2 P	1987-29-A	Indonesia Perumtel (Eastern Test Range)	20 March			6/4 GHz band		Communication satellite providing service to Indonesia and nearby Asian countries. Twenty-four transponders
Kvant-1	1987-30-A	USSR	31 March	177 320	89.2 51.6			Laboratory bay carrying scientific instruments for astrophysical observations and studies to the national economy. Docked with <i>Mir-1</i> on 5 April 1987
Cosmos-1834	1987-31-A	USSR	8 April	413 443	92.8 65			
Cosmos-1835	1987-32-A	USSR	9 April	180 367	89.7 65			Decayed on 4 June 1987

Cosmos-1836	1987-33-A	USSR	16 April	188 313	89.2 65		Decayed on 2 December 1987
Progress-29 modified <i>Soyuz</i> spacecraft without the descent section; 7 tonnes at launch	1987-34-A	USSR (Baikonur)	21 April	194 257	88.7 51.6		Expendable supply craft. Docked with <i>Mir-1</i> on 23 April 1987 and decayed on 11 May 1987
Cosmos-1837	1987-35-A	USSR	22 April	198 255	88.7 82		Recovered on 28 April 1987
Cosmos-1838 to Cosmos-1840	1987-36-A to 1987-36-C	USSR	24 April	213 17 550	312 64.7		
Cosmos-1841	1987-37-A	USSR	24 April	225 403	90.5 62.8		Scientific instruments for continuing space research begun by <i>Cosmos-1645</i> and <i>Cosmos-1744</i> . Preparation semiconductor materials with improved properties and pure biological preparation under conditions of micro-gravitation. Recovered on 8 May 1987
Cosmos-1842	1987-38-A	USSR	27 April	648 678	97.8 82.5		
Cosmos-1843	1987-39-A	USSR	5 May	214 312	89.5 70.4		Recovered on 19 May 1987
Gorizont-14 3-axis stabilized	1987-40-A	USSR (Baikonur)	11 May	35 174 in geostationary-satellite orbit	1401 0.52	5.7-6.2 GHz (reception) 3.4-3.9 GHz (emission)	Television and multichannel radiocommunications
Cosmos-1844	1987-41-A	USSR	13 May	861 879	102 71		
Cosmos-1845	1987-42-A	USSR	13 May	217 400	90.4 70		Recovered on 27 May 1987
USA-22	1987-43-A	United States Department of Defense (Western Test Range)	15 May				
USA-23	1987-43-E						
USA-24	1987-43-F						
USA-25	1987-43-H						

Code name Spacecraft description	International number	Country Organization Site of launching	Date	Initial orbital data			Frequencies Transmitter power	Observations
				Perigee (km)	Apogee (km)	Inclination (degree)		
Progress-30 modified Soyuz spacecraft without the descent section; 7 tonnes at launch	1987-44-A	USSR (Baikonur)	19 May	192 265	88.8 51.6			Expendable supply craft. Docked with <i>Mir-1</i> on 21 May 1987 and delivered fuel, supplies and food for the crew. Decayed on 19 July 1987
Cosmos-1846	1987-45-A	USSR	21 May	196 314	89.2 82.4			Recovered on 4 June 1987
Cosmos-1847	1987-46-A	USSR	26 May	177 373	89.7 67.2			Decayed on 22 July 1987
Cosmos-1848	1987-47-A	USSR	28 May	208 400	90.2 72.9			Recovered on 11 June 1987
Cosmos-1849	1987-48-A	USSR	4 June	613 39 342	709 62.9			
Cosmos-1850	1987-49-A	USSR	9 June	785 825	100.8 74			
Cosmos-1851	1987-50-A	USSR	12 June	592 39 402	710 62.8			
Cosmos-1852 to Cosmos-1859	1987-51-A to 1987-51-H	USSR	16 June	1440 1507	115 74			Eight satellites launched by the same launcher
Cosmos-1860	1987-52-A	USSR	18 June	255 283	89.7 65			
USA-26	1987-53-A	United States Department of Defense	20 June					
Cosmos-1861	1987-54-A	USSR	23 June	995 1014	105 83			System for determining position of USSR ships and radio equipment to provide amateur radio links for scientific and educational experiments
Cosmos-1862	1987-55-A	USSR	1 July	645 679	97.7 82.5			Decayed on 19 July 1987 Recovered on 1 December 1987

Cosmos-1863	1987-56-A	USSR	4 July	208 383	90.8 72.9		Recovered on 18 July 1987
Cosmos-1864	1987-57-A	USSR	6 July	977 1019	104.8 83		
Cosmos-1865	1987-58-A	USSR	8 July	204 327	89.5 64.8		Recovered on 14 August 1987
Cosmos-1866	1987-59-A	USSR	9 July	177 386	89.8 67		Decayed on 6 November 1987
Cosmos-1867	1987-60-A	USSR	10 July	797 813	100.8 65		
Cosmos-1868	1987-61-A	USSR	14 July	279 726	94.5 74		
Cosmos-1869	1987-62-A	USSR	16 July	647 679	97.8 82.5		Optical scanning, mechanical and radiophysical apparatus to obtain oceanographic data
Soyuz-TM 3	1987-63-A	USSR (Baikonur)	22 July				Crew: A. Viktorenko, A. Aleksandrov (USSR) and M. Faris (Syria). Docked with the <i>Mir</i> orbital complex on 30 July 1987. Returned to Earth on 29 December 1987
Cosmos-1870	1987-64-A	USSR	25 July	168	88.7		Instruments for remote sounding of the Earth's surface and oceans. The satellite was placed in orbit by a <i>Proton</i> booster rocket
Cosmos-1871	1987-65-A	USSR	1 Aug.	191 212	88.3 97		Recovered on 10 August 1987
Progress-31 modified <i>Soyuz</i> spacecraft without the descent section; 7 tonnes at launch	1987-66-A	USSR (Baikonur)	3 Aug.	193 269	88.8 51.6		Expendable supply craft. Docked with <i>Mir-1</i> . Decayed on 23 September 1987
PRC-20	1987-67-A	China (Jiuquan)	5 Aug.	171 395	90.2 63		Two microgravity experimental devices from a French company. Decayed on 23 August 1987
Meteor-2 (16) 2750 kg	1987-68-A	USSR (Plesetsk)	18 Aug.	954 974	104.1 82.5		Meteorology. Equipment for obtaining global images of cloud cover and the underlying surface in the visible infrared bands
Cosmos-1872	1987-69-A	USSR	19 Aug.	208 333	89.6 72.9		Recovered on 30 August 1987

Code name Spacecraft description	International number	Country Organization Site of launching	Date	Initial orbital data			Frequencies Transmitter power	Observations
				Perigee (km)	Apogee (km)	Inclination (degree)		
ETS-5 (Kiku-5)	1987-70-A	Japan National Space Development Agency (Tanegashima)	27 Aug.	199 35 901	633 27.9			Launched by the <i>H-I</i> launch vehicle
Cosmos-1873	1987-71-A	USSR	28 Aug.	186 274	88.8 64.8			Recovered on 14 September 1987
Cosmos-1874	1987-72-A	USSR	3 Sept.	208 333	89.6 73			Recovered on 17 September 1987
Ekran-16 3-axis stabilized; 5 tonnes; solar cells	1987-73-A	USSR (Baikonur)	4 Sept.	35 539 in geostationary-satellite orbit	0.4 1423	5.7-6.2 GHz (reception) 3.4-3.9 GHz (emission)		Television relay
Cosmos-1875 to Cosmos-1880	1987-74-A to 1987-74-F	USSR (Plesetsk)	7 Sept.	1401 1437	82.6 114			
PRC-21	1987-75-A	China (Jiuquan)	9 Sept.	204 308	63 89.6			
Cosmos-1881	1987-76-A	USSR	11 Sept.	227 270	64.8 89.5			
Cosmos-1882	1987-77-A	USSR	15 Sept.	196 253	82.3 88.6			
Aussat-K3 Hughes-type HS 376 spinstabilized cylinder; 650 kg; solar cells (1180 W)	1987-78-A	Australia AUSSAT (Kourou)	16 Sept.	35 506 35 814 in geostationary-satellite orbit at 164° E	0.1 1429.6	14/12 GHz band 3×30 W 11×12 W		Telecommunication and direct television
Eutelsat-1 F4 (ECS-4) 3-axis stabilized; 700 kg; 2 solar panels (1000 W)	1987-78-B	Europe European Space Agency (Kourou)	16 Sept.	35 690 35 989 in geostationary-satellite orbit at 10° E	0.2 1438	14/11 GHz band 14×20 W		Telecommunications and distribution of television pro- grammes. Fourteen transponders

Cosmos-1883 to Cosmos-1885	1987-79-A to 1987-79-C	USSR	16 Sept.	19 133 830	64.9 675		Objective: to develop the elements and apparatus of a space navigation system to determine the location of aircraft and ocean-going ships
Oscar-27 and Oscar-28	1987-80-A and 1987-80-B	International	16 Sept.	1018 1183 1017 1185	90.3 107.3 90.3 107.3		Amateur radio
Cosmos-1886	1987-81-A	USSR	17 Sept.	178 384	67.2 89.8		Recovered on 2 November 1987
Progress-32 modified <i>Soyuz</i> spacecraft without the descent section; 7 tonnes at launch	1987-82-A	USSR (Baikonur)	23 Sept.	193 267	51.6 88.8		Expendable supply craft. Docked with <i>Mir</i> orbital complex and delivered fuel and supplies for the crew. After undocking it disintegrated on re-entry on 19 November 1987
Cosmos-1887	1987-83-A	USSR	29 Sept.	224 406	90.5 62.8		Research into: the effects of spaceflight on monkeys and other living organisms, radiation safety and physics. Taking part in the studies are scientists from the European Space Agency, Czechoslovakia, France, German Democratic Republic, Hungary, Poland, Romania and the United States
Cosmos-1888	1987-84-A	USSR	1 Oct.	35 980	1443 1.4		
Cosmos-1889	1987-85-A	USSR	9 Oct.	216 400	90.4 70		Recovered on 23 October 1987
Cosmos-1890	1987-86-A	USSR	10 Oct.	414 442	92.9 65		
Cosmos-1891	1987-87-A	USSR	14 Oct.	957 1030	104.9 83		
Cosmos-1892	1987-88-A	USSR	20 Oct.	647 678	97.8 82.5		
Cosmos-1893	1987-89-A	USSR	22 Oct.	179 374	89.7 67		Decayed on 16 December 1987

Code name Spacecraft description	International number	Country Organization Site of launching	Date	Initial orbital data			Frequencies Transmitter power	Observations
				Perigee (km) Apogee (km)	Period (min) Inclination (degree)			
USA-27	1987-90-A	United States Department of Defense	26 Oct.					
Cosmos-1894	1987-91-A	USSR	28 Oct.	35 920	1442 1.3			
Cosmos-1895	1987-92-A	USSR	11 Nov.	217 402	90.4 70.4			Recovered on 26 November 1987
Cosmos-1896	1987-93-A	USSR	14 Nov.	203 319	89.4 64.8			Recovered on 25 December 1987
Progress-33 modified <i>Soyuz</i> spacecraft without the descent section; 7 tonnes at launch	1987-94-A	USSR (Baikonur)	21 Nov.	193 268	88.8 51.6			Expendable supply craft. Docked with <i>Mir-1</i> and disintegrated on re-entry on 19 December 1987
TVSat-1	1987-95-A	Fed. Rep. of Germany (Kourou)	21 Nov.	35 217 35 832	1422.8 0.1	12 GHz and 17 GHz bands		Direct broadcasting television
Cosmos-1897	1987-96-A	USSR	26 Nov.	35 770	1435 1.4	centimetre band		Experimental equipment for retransmitting telegraph and telephone information in the centimetric waveband
USA-28	1987-97-A	United States Department of Defense	29 Nov.					
Cosmos-1898	1987-98-A	USSR	1 Dec.	781 820	100.8 74			
Cosmos-1899	1987-99-A	USSR	7 Dec.	216 297	89.3 70.4			Recovered on 21 December 1987

Raduga-21 3-axis stabilized; 5 tonnes; solar panels	1987-100-A	USSR (Baikonur)	10 Dec.	35 437 35 705	1425.1 1.5 in geostationary-satellite orbit	5.7-6.2 GHz (reception) 3.4-3.9 GHz (emission)	Television and multichannel radiocommunications
Cosmos-1900	1987-101-A	USSR	12 Dec.	263 287	89.8 65		
Cosmos-1901	1987-102-A	USSR	14 Dec.	181 376	89.8 65		
Cosmos-1902	1987-103-A	USSR	15 Dec.	373 417	92.4 66		
Soyuz-TM 4	1987-104-A	USSR (Baikonur)	21 Dec.				Crew: V. Titov, M. Manarov, A. Levchenko. Relief crew for the space station <i>Mir-1</i> . Docked with <i>Mir</i> orbital complex on 23 December 1987
Cosmos-1903	1987-105-A	USSR	21 Dec.	614 39 342	709 62.8		
Cosmos-1904	1987-106-A	USSR	23 Dec.	989 1021	104.9 83		
Cosmos-1905	1987-107-A	USSR	25 Dec.	229 280	89.6 70.4		Recovered on 8 January 1988
Cosmos-1906	1987-108-A	USSR	26 Dec.	190 274	88.8 82.6		Earth resources exploration
Ekran-17 3-axis stabilized; 5 tonnes; solar cells	1987-109-A	USSR (Baikonur)	27 Dec.	35 628	1422 1.5 in geostationary-satellite orbit	5.7-6.2 GHz (reception) 3.4-3.9 GHz (emission)	Television relay
Cosmos-1907	1987-110-A	USSR	29 Dec.	208 398	90.2 72.9		Recovered on 12 January 1988

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