

**Secretariat**

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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 13 May 2015 from the Permanent Mission of
the Russian Federation to the United Nations (Vienna) addressed
to the Secretary-General**

The Permanent Mission of the Russian Federation to the United Nations (Vienna), 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 transmit registration data on space launches by the Russian Federation for the period from October 2014 to March 2015, and data on the space objects that were no longer in Earth orbit and ceased to exist during that period (see annexes I-VI).

The Permanent Mission also has the honour to transmit information on the termination of operations of the Bonum-1, Express-AM1 and Express-MD1 satellites (see annex VII).



Annex I

Registration data on space launches by the Russian Federation for October 2014*

1. In October 2014, the following space objects under the jurisdiction and control of the Russian Federation were launched:

Number	Name of space object	Date of launch	Basic orbital characteristics				General function of space object
			Apogee (km)	Perigee (km)	Inclination (degrees)	Period	
3412-2014-019	Express-AM6, launched by a Proton-M carrier rocket with a Breeze-M booster from the Baikonur launch site	21 October	37 787	31 275	0.7	22 hours, 53 minutes	Telecommunications satellite
3413-2014-020	Progress-M 25M, launched by a Soyuz-2-1a carrier rocket from the Baikonur launch site	29 October	239	193	51.7	88.5 minutes	Delivery to the International Space Station of fuel, water, oxygen, air, food and other consumable materials and equipment (also for the American section and the European Space Agency) required for manned operation of the Station
3414-2014-021	Meridian 7, launched by a Soyuz-2-1a carrier rocket with a Fregat booster from the Plesetsk launch site	30 October	39 708	998	62.5	12 hours, 4 minutes	Communications satellite intended to support seagoing vessels and aircraft and to transfer data

2. In October 2014, the Russian Federation did not launch any space objects on behalf of foreign clients.

3. The following space objects ceased to exist in October 2014 and were no longer in Earth orbit as at 2400 hours Moscow time on 31 October 2014:

2011-062C (Chibis-M), which did not survive re-entry on 16 October;

1988-032A (Cosmos-1939), which did not survive re-entry on 29 October.

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

Annex II

Registration data on space launches by the Russian Federation for November 2014*

1. In November 2014, the following space object under the jurisdiction and control of the Russian Federation was launched:

Number	Name of space object	Date of launch	Basic orbital characteristics				General function of space object
			Apogee (km)	Perigee (km)	Inclination (degrees)	Period (minutes)	
3415-2014-022	Soyuz TMA-15M, launched by a Soyuz-FG carrier rocket from the Baikonur launch site	24 November	242	199	51.7	88.7	Delivery to the International Space Station of the crew of Expeditions 42 and 43, consisting of Commander Anton Shkaplerov (Russian Federation) and flight engineers Terry Virts (National Aeronautics and Space Administration) and Samantha Cristoforetti (European Space Agency)

2. In November 2014, the Russian Federation launched the following space object on behalf of foreign clients:

On 6 November, the remote sensing satellites Asnaro, Hodoyoshi-1, ChubuSat-1, QSAT-EOS and the astronomical research and remote sensing satellite Tsubame (all of Japan) were launched from the Dombrovsky launch site with an RS20B ICBM.

3. The following space objects ceased to exist in November 2014 and were no longer in Earth orbit as at 2400 hours Moscow time on 30 November 2014:

1983-010A (Cosmos 1441), which did not survive re-entry on 8 November;

2014-031A (Soyuz TMA-13M), which landed in a predetermined location with members of International Space Station Expedition 42 on 10 November;

2014-042A (Progress M-24M), which was deorbited into the Pacific Ocean at a predetermined location on 20 November; fragments of the space object that had not burned up were sunk.

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

Annex III

Registration data on space launches by the Russian Federation for December 2014*

1. In December 2014, the following space objects under the jurisdiction and control of the Russian Federation were launched:

Number	Name of space object	Date of launch	Basic orbital characteristics				General function of space object
			Apogee (km)	Perigee (km)	Inclination (degrees)	Period	
3416-2014-023	Cosmos-2501, launched by a Soyuz-2-1b carrier rocket with a Fregat booster from the Plesetsk launch site	1 December	19 182	19 107	64.8	11 hours, 16 minutes	Work on the Global Navigation Satellite System (GLONASS)
3417-2014-024	Yamal-401, launched by a Proton-M carrier rocket with a Breeze-M booster from the Baikonur launch site	15 December	35 787	35 786	0.04	23 hours, 56 minutes	Providing communications services and television broadcasting to Europe and Asia, as well as to Russian gas companies
3418-2014-025	Full-scale mock-up space vehicle, launched by an Angara-5A carrier rocket with a Breeze-M booster from the Plesetsk launch site	23 December	39 088	36 159	0.3	25 hours, 31 minutes	Transfer to disposal orbit of the full-scale mock-up space vehicle and Breeze-M booster after launch into geostationary orbit
3419-2014-026	Cosmos-2502, launched by a Soyuz-2-1b carrier rocket from the Plesetsk launch site	25 December	893	239	67.1	95.8 minutes	Intended for assignments on behalf of the Ministry of Defence of the Russian Federation

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Number	Name of space object	Date of launch	Basic orbital characteristics				General function of space object
			Apogee (km)	Perigee (km)	Inclination (degrees)	Period	
3420-2014-027	Resurs P2, launched by a Soyuz-2-1b carrier rocket from the Baikonur launch site	26 December	475	200	97.3	91 minutes	Taking highly detailed images of the Earth's surface, mapping, environmental monitoring, examining natural resources, monitoring natural disasters and evaluating their impact

2. In December 2014, the Russian Federation launched the following space objects on behalf of foreign clients:

On 19 December, the Kondor-E remote sensing satellite (South Africa) was launched from the Baikonur launch site with an RS-18 launch vehicle;

On 28 December, the Astra 2G telecommunications satellite (Luxembourg) was launched by a Proton-M carrier rocket with a Breeze-M booster from the Baikonur launch site.

3. As at 2400 hours Moscow time on 31 December 2014, no space objects of the Russian Federation had been found to have ceased to exist in Earth orbit in December 2014.

Annex IV

Registration data on space launches by the Russian Federation for January 2015*

1. In January 2015, the Russian Federation did not launch any objects over which it has control and that, in accordance with established practice and its international obligations, were included in the Register of Space Objects.
2. In January 2015, the Russian Federation did not launch any space objects on behalf of foreign clients.
3. The following space objects ceased to exist in January 2015 and were no longer in Earth orbit as at 2400 hours Moscow time on 31 January 2015:
 - 1990-076A (Cosmos-2097), which did not survive re-entry on 9 January;
 - 1998-067ET (NS-1), which did not survive re-entry on 15 January.

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

Annex V

Registration data on space launches by the Russian Federation for February 2015*

1. In February 2015, the following space objects under the jurisdiction and control of the Russian Federation were launched:

Number	Name of space object	Date of launch	Basic orbital characteristics				General function of space object
			Apogee (km)	Perigee (km)	Inclination (degrees)	Period (minutes)	
3421-2015-001	Progress-M-26M, launched by a Soyuz-U carrier rocket from the Baikonur launch site	17 February	246.2	192.6	51.7	88.5	Delivery to the International Space Station of fuel, water, oxygen, air, food and other consumable materials required for manned operation of the Station
3422-2015-002	Cosmos-2503, launched by a Soyuz-2-la carrier rocket from the Plesetsk launch site	27 February	530	328	97.6	93	Intended for assignments on behalf of the Ministry of Defence of the Russian Federation

2. In February 2015, the Russian Federation launched the following space object on behalf of a foreign client:

On 1 February, the Inmarsat-5F2 telecommunications satellite (United Kingdom of Great Britain and Northern Ireland) was launched by a Proton-M carrier rocket with a Breeze-M booster from the Baikonur launch site.

3. As at 2400 hours Moscow time on 28 February 2015, no space objects of the Russian Federation had been found to have ceased to exist in Earth orbit in February 2015.

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

Annex VI

Registration data on space launches by the Russian Federation for March 2015*

1. In March 2015, the following space objects under the jurisdiction and control of the Russian Federation were launched:

Number	Name of space object	Date of launch	Basic orbital characteristics				General function of space object
			Apogee (km)	Perigee (km)	Inclination (degrees)	Period	
3423-2015-003	Express-AM7, launched by a Proton-M carrier rocket with a Breeze-M booster from the Baikonur launch site	19 March	35 781.1	5 387.9	19.6	12 hours, 14 minutes	Telecommunications satellite
3424-2015-004	Soyuz TMA-16M, launched by a Soyuz-FG carrier rocket from the Baikonur launch site	27 March	238	198	51.6	88.6 minutes	Delivery to the International Space Station of the crew of Expeditions 43 and 44, consisting of Commander Gennady Padalka (Russian Federation) and flight engineers Mikhail Kornienko (Russian Federation) and Scott Kelly (United States of America)
3425-2015-005	Gonets-M No. 21 ^a	31 March	1 507	1 501.9	82.5	115.8 minutes	Work on a low-orbit satellite communications system
3426-2015-005	Gonets-M No. 22 ^a	31 March	1 507	1 501.9	82.5	115.8 minutes	Work on a low-orbit satellite communications system
3427-2015-005	Gonets-M No. 23 ^a	31 March	1 507	1 501.9	82.5	115.8 minutes	Work on a low-orbit satellite communications system
3428-2015-005	Cosmos-2504 ^a	31 March	1 504	1 167.2	82.5	112.2 minutes	Intended for assignments on behalf of the Ministry of Defence of the Russian Federation

^a Space objects launched by a single Rokot carrier rocket from the Plesetsk launch site.

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2. In March 2015, the Russian Federation launched the following space object on behalf of a foreign client:
On 26 March, the KompSat-3A remote sensing satellite (Republic of Korea) was launched from the Dombarovsky launch site with an RS-20B ICBM.
3. The following space object ceased to exist in March 2015 and was no longer in Earth orbit as at 2400 hours Moscow time on 31 March 2015.
2014-057A (Soyuz-TMA 14M), which landed in a predetermined location with members of International Space Station Expedition 43 on 12 March.

Annex VII

Information concerning termination of operations and implementation of programme of transfer to disposal orbit of space objects operated by the Russian Federation*

Bonum-1 (1998-068A)

Name of space object:	Bonum-1 (1998-068A)
Date when space object was no longer functional:	9 December 2014, at 1242 hours, 6 seconds Universal Coordinated Time (UTC)
Date of transfer of space object to disposal orbit:	9 December 2014, at 0328 hours, 52 seconds UTC
Physical conditions during transfer of space object to disposal orbit:	Fuels, oxidizers and helium removed from pipes and tanks All satellite systems shut down
Parameters of disposal orbit at 0328 hours, 52 seconds UTC on 9 December 2014	
Semi-major axis:	42,513.8 kilometres
Pericentre altitude above geostationary orbit (GEO):	339.1 kilometres
Apocentre altitude above GEO:	360.3 kilometres
Eccentricity:	0.0002495
Inclination:	2.4014 degrees

Express-AM1 (2004-043A)

Name of space object:	Express-AM1 (2004-043A)
Date when space object was no longer functional:	20 August 2013, at 0654 hours, 34 seconds UTC
Date of transfer of space object to disposal orbit:	19 August 2013, at 0406 hours, 0 seconds UTC

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

Physical conditions during transfer of space object to disposal orbit:	Shutdown of all channels and beacons in flight communication equipment Shutdown of control unit of flight communication equipment Blocking of software and signals in on-board control system Solar batteries turned away from Sun Disconnection of batteries and lines of charge Shutdown of on-board equipment in command and measurement system
Parameters of disposal orbit at 0406 hours, 0 seconds UTC on 19 August 2013	
Semi-major axis:	42,467.0 kilometres
Pericentre altitude above GEO:	281.0 kilometres
Apocentre altitude above GEO:	325.0 kilometres
Eccentricity:	0.000511
Inclination:	2.5905 degrees

Express-MD1 (2009-007B)

Name of space object:	Express-MD1 (2009-007B)
Date when space object was no longer functional:	26 August 2013, at 1013 hours, 52 seconds UTC
Date of transfer of space object to disposal orbit:	25 August 2013, at 0155 hours, 0 seconds UTC
Physical conditions during transfer of space object to disposal orbit:	Shutdown of all channels and beacons in flight communication system Shutdown of control unit of flight communication system Blocking of software and signals in on-board control system Solar batteries turned away from Sun Disconnection of batteries and lines of charge Shutdown of on-board equipment in command and measurement system

Parameters of disposal orbit at 1013 hours, 52 seconds UTC on
26 August 2013

Semi-major axis:	42,496.0 kilometres
Pericentre altitude above GEO:	315.2 kilometres
Apocentre altitude above GEO:	348.2 kilometres
Eccentricity:	0.000389
Inclination:	0.1173 degrees
