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

Note verbale dated 7 November 2014 from the Permanent Mission of Italy to the United Nations (Vienna) addressed to the Secretary-General

The Permanent Mission of Italy 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 information on Italian space objects e-st@r-1, UniSat-5, UniSat-6 and TigriSat (see annex).

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Annex

Registration data on space objects launched by Italy*

e-st@r-1

Name of space object:	e-st@r-1 (international designator 2012-006C)
Name of launching State:	Italy
Satellite owner:	Polytechnic University of Turin http://areeweb.polito.it/cubesat-team/
Date and location of launch:	13 February 2012 at 1000 hours UTC French Guiana (France)
Launch vehicle:	Vega (VV01)
Basic orbital parameters:	
Nodal period:	103 minutes
Inclination:	69.5 degrees
Apogee:	1,450 kilometres
Perigee:	350 kilometres
General function:	e-st@r-1 is a nanosatellite of the CubeSat category. Its dimensions are 0.1 x 0.1 x 0.1 m and its weight is 0.968 kg. Under the University's programme, the mission's purpose is the demonstration of an active 3-axis attitude determination and control system including an inertial measuring unit

UniSat-5

Name of space object:	UniSat-5 (international designator 2013-066F)
Name of launching State:	Italy
Satellite owner:	GAUSS S.r.L
Date and location of launch:	21 November 2013 at 0710 hours UTC Dombarovsky Cosmodrome at Yasny, Russian Federation
Launch vehicle:	Dnepr RS-20 rocket from International Space Company (ISC) Kosmotras
Basic orbital parameters:	
Nodal period:	97.23 minutes
Inclination:	97.8 degrees

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

Apogee:	634 kilometres
Perigee:	633 kilometres
Current status:	Not functional. Failed after launch insertion and the automatic deployment of its microsatellites
General function:	UniSat-5 is an educational civilian satellite carrying onboard experiments. It is also a platform for the release of smaller satellites in orbit, the first in the history of microsatellites. Its weight at launch is 28 kg. Details and points of contact are available at www.gaussteam.com. UniSat-5 carried onboard the following subsatellites: • 4 CubeSats (10-cm cubes): ICUBE-1 (Pakistan), HumSat-D (Spain), Dove-4 (United States of America) and PUCP-Sat 1 (Peru) • 5 femtosats also known as “pocket cubes” (5-cm cubes with a mass between 0.1 and 1 kg): Eagle-1 and Eagle-2 (United States), QBScout-1 (United States), PUCP (Peru) and WREN (Germany) UniSat-5 satellite’s estimated decay date is 1 December 2034

UniSat-6

Name of space object:	UniSat-6 (international designator 2014-033C)
Name of launching State:	Italy
Satellite owner:	GAUSS S.r.L
Date and location of launch:	19 June 2014 at 1912 hours UTC Dombarovsky Cosmodrome at Yasny, Russian Federation
Launch vehicle:	Dnepr rocket from ISC Kosmotras
Basic orbital parameters:	
Nodal period:	97.88 minutes
Inclination:	97.97 degrees
Apogee:	701 kilometres
Perigee:	618 kilometres
Current status:	Operational for its expected lifetime of 2 years
General function:	UniSat-6 is an educational civilian satellite carrying onboard experiments. It is also a platform for the release of smaller satellites in orbit. Its launch weight is 26 kg and its

dimensions 0.473 x 0.5 x 0.5 m. Details and points of contact are available at www.gaussteam.com. After being deployed from the Dnepr upper stage, UniSat-6 — deployed the following subsatellites:

- 4 CubeSats: 1.33-kg AeroCube-6 (United States), 2.66-kg AntelSat (Uruguay), 3.6 kg TigriSat (Italy) and 4.00 kg Lemur-1 (United States)

UniSat-6 satellite's estimated decay date is 1 June 2035

TigriSat

Name of space object:	TigriSat (international designator reference is that of UniSat-6: 2014-033C)
Name of launching State:	Italy
Satellite owner:	University of Rome "La Sapienza", Department of Aeronautical, Electrical and Energetic Engineering
Date and location of launch:	19 June 2014 at 1912 hours UTC Dombarovsky Cosmodrome at Yasny, Russian Federation
Launch vehicle:	Dnepr rocket from ISC Kosmotras
Basic orbital parameters:	
Nodal period:	97.88 minutes
Inclination:	97.97 degrees
Apogee:	701 kilometres
Perigee:	618 kilometres
Current status:	Operational for 2 years after launch
General function:	TigriSat is an educational civilian CubeSat that has been deployed in orbit from the UniSat-6 satellite. It carries onboard a 1-km resolution dust storm detection payload. TigriSat weighs 3.6 kg TigriSat's estimated decay date is 1 December 2039