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## Committee on the Peaceful Uses of Outer Space

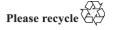
# Information furnished in conformity with the Convention on Registration of Objects Launched into Outer Space

Note verbale dated 15 September 2010 from the Permanent Mission of Japan to the United Nations (Vienna) addressed to the Secretary-General

The Permanent Mission of Japan 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 transmit information concerning the launching of space objects Venus Climate Orbiter "AKATSUKI" (PLANET-C) (international designator 2010-020D), Small Solar Power Sail Demonstrator "IKAROS" (international designator 2010-020E), Negai (international designator 2010-020C), UNITEC-1 (international designator 2010-023A) (see annex).

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#### Annex

### Registration data on space objects launched by Japan\*

#### **Venus Climate Orbiter "AKATSUKI" (PLANET-C)**

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

Committee on Space Research

international designator:

Name of space object:

2010-020D

Venus Climate Orbiter "AKATSUKI"

(PLANET-C)

National designator/registration

number:

2010-020D

State of registry: Japan

Date and territory or location of launch

Date of launch: 20 May 2010 21 hrs 58 min 22 sec UTC

Territory or location of launch: Tanegashima Space Centre, Kagoshima, Japan

Basic orbital parameters

Nodal period: 1,860 minutes
Inclination: 160 degrees

Apogee: 79,000 kilometres (Apocytherion)
Perigee: 500 kilometres (Pericytherion)

General function of space object: The mission of "AKATSUKI" (PLANET-C) is

to elucidate the dynamics of the atmosphere of Venus, in particular its super-rotation, by means of three-dimensional visualizations of atmospheric motions using multi-wavelength imaging from orbit. The satellite will also measure the surface temperatures and look for evidence of volcanic activity and lightning.

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<sup>\*</sup> The information was submitted using the form prepared pursuant to General Assembly resolution 62/101 and has been reformatted by the Secretariat.

Space object owner or operator: Japan Aerospace Exploration Agency

Launch vehicle: H-IIA Launch Vehicle Flight No. 17

(H-IIA 17F)

Celestial body that space object is

orbiting:

Venus

Other information: Basic orbital parameters described above are

for orbits around Venus and are as at 22 May

2010.

Launching organizations are Mitsubishi Heavy

Industries, Ltd. and Japan Aerospace

Exploration Agency.

#### Small Solar Power Sail Demonstrator "IKAROS"

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

Committee on Space Research

international designator:

2010-020E

Name of space object: Small Solar Power Sail Demonstrator

"IKAROS"

National designator/registration

number:

2010-020E

State of registry: Japan

Date and territory or location of launch

Date of launch: 20 May 2010 21 hrs 58 min 22 sec UTC

Territory or location of launch
Tanegashima Space Centre, Kagoshima, Japan

Basic orbital parameters

Nodal period: 444,480 minutes

Inclination: 24.5 degrees

Apogee: 159,800,000 kilometres (Aphelion)

Perigee: 107,600,000 kilometres (Perihelion)

General function of space object: Small Solar Power Sail Demonstrator

"IKAROS" is the world's first solar-powered sail craft employing both photon propulsion and thin-film solar power generation during its

interplanetary cruise.

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Space object owner or operator: Japan Aerospace Exploration Agency

Launch vehicle: H-IIA Launch Vehicle Flight No. 17

(H-IIA 17F)

Celestial body that space object is

orbiting:

Sun

Other information: Basic orbital parameters described above are

for orbits around the Sun and are as at

22 May 2010.

Launching organizations are Mitsubishi Heavy

Industries, Ltd. and Japan Aerospace

Exploration Agency.

#### Negai

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

Committee on Space Research

international designator:

2010-020C

Name of space object: Negai

National designator/registration

2010-020C

number:

State of registry: Japan

Date and territory or location of launch

Date of launch: 20 May 2010 21 hrs 58 min 22 sec UTC

Territory or location of launch: Tanegashima Space Centre, Kagoshima, Japan

Basic orbital parameters

Nodal period: 90 minutes
Inclination: 30 degrees

Apogee: 300 kilometres
Perigee: 300 kilometres

General function of space object: Space verification of an advanced information

processing system using commercial Field

Programmable Gate Arrays.

Date of decay/re-entry/deorbit: 26 June 2010

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Website: http://kuro.t.soka.ac.jp/negai/sokags/index.html

Space object owner or operator: Soka University Kuroki Laboratory

Launch vehicle: H-IIA Launch Vehicle Flight No. 17

(H-IIA 17F)

Other information: Launching organizations are Mitsubishi Heavy

Industries, Ltd. and Japan Aerospace

Exploration Agency.

#### **UNITEC-1**

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

Committee on Space Research

2010-020F

international designator:

Name of space object: UNITEC-1
National designator/registration 2010-020F

number:

State of registry: Japan

Date and territory or location of launch

Date of launch: 20 May 2010 21 hrs 58 min 22 sec UTC

Territory or location of launch: Tanegashima Space Centre, Kagoshima, Japan

Basic orbital parameters

Nodal period: Deep space trajectory to Venus (no cyclic

orbit)

Inclination: 31 degrees

Apogee: 160,000,000 kilometres

Perigee: 291 kilometres

General function of space object: Technology experiment of a deep space probe

and onboard computers; low bit-rate communication from deep space; and measurement of the radiation environment.

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Website: www.unisec.jp/unitec-1/

Space object owner or operator: Japan Aerospace Exploration Agency

Launch vehicle: H-IIA Launch Vehicle Flight No. 17

(H-IIA 17F)

Celestial body that space object is

orbiting:

Sun

Other information: Launching organizations are Mitsubishi Heavy

Industries, Ltd. and Japan Aerospace

Exploration Agency.

#### **SERVIS-2**

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

Committee on Space Research

international designator:

2010-023A

Name of space object: SERVIS-2

National designator/registration

number:

2010-023A

State of registry: Japan

Date and territory or location of launch

Date of launch: 2 June 2010 1 hr 59 min 11 sec UTC

Territory or location of launch: Plesetsk Cosmodrome, Russian Federation

Basic orbital parameters

Nodal period: 109 minutes
Inclination: 100.4 degrees
Apogee: 1,201 kilometres
Perigee: 1,191 kilometres

General function of space object: Acquisition of technical data on commercial

off-the-shelf parts and technologies for space

applications.

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Website: www.usef.or.jp/english/e\_index.html

Space object owner or operator: Institute for Unmanned Space Experiment Free

Flyer

Launch vehicle: ROKOT

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