

Document Requirements Description for Wra Space Activities Information Document
WRA-DRD, Issue 1.3, January 2019

This document contains the **Document Requirements Description (DRD)** for the “<entity> Space Activities Information Document” (SAID) which is used for the Dutch Space Activities Act (Wet ruimtevaartactiviteiten – Wra). The SAID has to be provided with the licence request (for the initial audit) and maintained/updated at least for each supervision audit.

Please use your own document layout for your Wra SAID, showing you take full responsibility for its contents (e.g. include a logo paper of your organisation on frontpage / headers).

All text in box format describes the required information. In this box also a justification of the required information has been provided with additional explanation or suggestions and the Wra references.

The text boxes shall remain in the SAID document(s).

Text formatted in italic/red shall be deleted or replaced.

Normal formatted text is provided as text suggestions (e.g. in Chapter 1 and section 2.1).

The document structure and Table of Contents shall remain as defined in this DRD, to allow an efficient and uniform handling of the information by Rijksinspectie Digitale Infrastructuur and the audit team.

If a specific section is deemed not applicable to the entity, this **has to** be clarified.

Updates of the SAID shall be provided with tracked changes, to facilitate ease of review upon each update. MS Word versions of the SAID shall be provided (upon request) to allow efficient and effective review and feedback.

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Document information

The document shall provide at least the information as described in this document. .

Revision Record

Only with regard to the supervision audits include a short description of the changes compared with the version of the initial or the former supervision audit, see chapter 6.

Issue	Date	Author(s)	Brief description of change
1.0	June 2015	Wra-team	Initial version for Rijksinspectie Digitale Infrastructuur
1.1	Aug. 2015	Wra-team	Update used for audits of <NAME OF ORGANISATION>
1.2	July 2016	Wra-team	Update for audit of <THE NAME OF THE ORGANISATION>, including ○ Document title updated ○ Page 1 – Introduction updated ○ Revision record – added DRD issue information ○ Section 1.1 – included AD reference for DRD ○ Section 1.2.1 – changed DRD issue number ○ Section 2.1 – added table for contact person details ○ Section 2.2 – changed question to include future missions and satellites, added stowed dimensions, removed ownership rows, described design/economical lifetime ○ Section 2.3 – Added question to distinguish between entity internal overall quality control and quality implementation for space activities ○ Section 2.8 – Added section on Restrictions (e.g. ITAR) ○ Section 3.2.3 – Added question for location of mission control centre ○ Section 4.1 – Added table for Ownership information ○ Section 4.2 – Added table for Insurance coverage information ○ Editorial updates
1.3	Jan. 2019	Wra-team	Updates for optimisation of the audit process, including: ○ Instructions (first page) updated, e.g. instructions to use tracked changes and include delivery of MS Word version ○ Revision Record – Initials added

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Issue	Date	Author(s)	Brief description of change
			○ <i>Section 1.1 – Added emphasis that the resulting document is called the SAID</i> ○ <i>Section 1.2.1 – Updated DRD version</i> ○ <i>Section 1.2.2 – Changed URL for [RD-05]</i> ○ <i>Section 1.3 – Added definitions of terms in Wra context</i> ○ <i>Section 2.1 – Added list of required roles</i> ○ <i>Section 2.2 – Added note with information about the Registration</i> ○ <i>Section 2.2 – Removed (old) link to registration database from textbox and included new link to related documents on Rijksinspectie Digitale Infrastructuur website</i> ○ <i>Section 2.2 – Added row for launch operator</i> ○ <i>Section 2.2 – Added rows for downlink frequency/rate, uplink frequency/rate, commanding interval and last command executed</i> ○ <i>Section 2.3 – Changed example to ISO 9001:2015</i> ○ <i>Section 2.7 – Included that a contingency procedure shall be provided and referenced</i> ○ <i>Section 4.4 – Added note to clarify the section only relates to incidents in the past</i> ○ <i>Section 6 – Added SAID</i> ○ <i>Several minor textual corrections/updates</i>

Distribution and classification

Include information about the distribution and classification of the document. In case of restricted classification this shall be indicated for each part of the text where relevant.

All information, presented by the entity, in written form, or by personal communication and information obtained during visits shall be handled as strictly confidential.

1 Introduction

1.1 Background

Include a short description of the background of this document, including reference to this Document Requirements Description (DRD) for Wra Space Activities Information Document (SAID).

- 1 – When will (has) the licence be (been) requested and for which activities?
- 2 – When will the space activity for which the licence is requested start?
- 3 – When has the licence been granted, for which activities and under which conditions (if any – reference is sufficient)?

Justification: It is forbidden to perform space activities as defined in the Wra without licence.
(Ref: Wra – Articles 3 (1) and 13 (1)).

This document provides the “<entity> Space Activities Information Document”, in line with the Document Requirements Description (DRD) [AD-1], as to be provided with the licence request (for the initial audit) and maintained/updated at least for each supervision audit.

This DRD, once filled in by <entity>, is called SAID.

A Wra licence request has been submitted on <date>, for the performance of the following space activities: <space activities>.

Optional text after granting of the licence:

On <date> Dutch Authority for Digital Infrastructure (Rijksinspectie Digitale Infrastructuur (hereafter: RDI)) has provided a licence to <entity>.

The (planned) date for start of these space activities is <planned launch date/period>.

In the scope of the continuous supervision by RDI on space activities as defined in the Wra, this document is initially provided with the licence request as input for the initial audit, and updated (if needed) for supervision audits.

1.2 Relevant information/documents

Include a list of applicable and/or reference information/documents (including identification, version and date).

The following subsections provide an overview of the relevant information and documents:

- Applicable Documents (AD)
- Reference Documents (RD)

1.2.1 Applicable Documents

The following documents and information are considered applicable:

- [AD-1] Document Requirements Description for Wra Space Activities Information Document, WRA-DRD, issue 1.3, January 2019.

1.2.2 Reference Documents

The following documents contain references and background information for the information provided in this document:

- [RD-01] Wet ruimtevaartactiviteiten
 <http://wetten.overheid.nl/BWBR0021418>
- [RD-02] Besluit register ruimtevoorwerpen,
 <http://wetten.overheid.nl/BWBR0022944>
- [RD-03] Regeling aanvraag vergunning ruimtevaartactiviteiten en registratie,
 <http://wetten.overheid.nl/BWBR0023494>
- [RD-04] Besluit ongeleide satellieten
 <http://wetten.overheid.nl/BWBR0036190>
- [RD-05] Memorie van Toelichting (Explanatory Note to the Space Activities Act),
 <https://zoek.officielebekendmakingen.nl/kst-30609-3.html>
- [RD-06] Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer
 Space, including the Moon and other Celestial Bodies 18 UST 2410 (1967) (Outer Space
 Treaty - OST); Convention on International Liability for Damage Caused by Space Objects 672
 UN Treaty Ser 119 (1968) 24 UST 2389 (1972) (Liability Convention), Convention on
 Registration of Objects Launched into Outer Space 28 UST 695 (1975) (Registration
 Agreement).
 The texts of all treaties are available at
 <http://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties.html>
- [RD-07] ITU Radio Regulations and ITU-R Recommendations
 <http://www.itu.int/pub/R-REG-RR>, <http://www.itu.int/pub/R-REC>
- [RD-08] Burgerlijk Wetboek Boek 2 Titel 9 – De jaarrekening en het jaarverslag
 (Part 9 of Book 2 of the Netherlands Civil Code Dutch accounting law)
 <http://wetten.overheid.nl/BWBR0003045/Boek2/Titel9>
- [RD-09] Space Debris Mitigation Guidelines, IADC-02-01, Revision 1, September 2007
 <http://www.iadc-online.org>
- [RD-10] International Organization for Standardization (ISO),
 <http://www.iso.org>,
 including the 49.140 Space systems and operations standards and
 ISO 24113 on Space debris mitigation requirements
- [RD-11] European Cooperation for Space Standardization (ECSS),
 <http://www.ecss.nl>
- [RD-12] Richtlijnen voor de Jaarverslaggeving, <http://www.rjnet.nl/Publicaties/Richtlijnen>
- [RD-13] International Financial Reporting Standards,
 <http://www.ifrs.org>
- [RD-14] <TBW>

1.3 Terms, acronyms and abbreviations

Include and/or update below the lists of terms, acronyms and abbreviations used in this document.

1.3.1 Terms

The following definitions provide guidance for consistent use of these terms within the Wra context.

Guided Satellite

An object in outer space of which the natural orbit can be changed autonomously or from Earth, with the objective to maintain the current orbit or obtain a new orbit.

Unguided Satellite

An object in outer space that follows a natural orbit, without the objective that the orbit can be changed autonomously or from Earth.

Non-operational Satellite

A space object is considered to be non-operational when

- *The space object has reached its end of mission and*
 - *the license holder has taken all possible space debris mitigation measures, including switch off the space object's transmitter and attitude and orbit control systems (provided that the space object includes such systems) by telecommand, and*
 - *the license holder has provided a written statement to RDI stating that the space object's mission is completed and that the license holder does not intend to restart operations with the space object, and*
 - *the license holder has submitted the registration form requesting to change the status of the space object, and*
 - *RDI has (formally) communicated her decision to consider the space object as non-operational to the license holder;*
- *no telecommunication with the space object is possible due to a space object anomaly and*
 - *the license holder has informed RDI in a written anomaly report about the anomaly and the taken actions to solve the problem, and*
 - *the problem has been discussed with RDI and the license holder has followed the agency's instructions, and*
 - *the license holder has submitted the registration form requesting to change the status of the space object, and*
 - *RDI has (formally) communicated her decision to consider the space object as non-operational to the license holder.*

Incidents

Incidents, as mentioned in § 3. Disasters Section 10 sub 1 of the Wra, which always have to be reported are:

- *situations of harmful interference (reported with an ITU-RR report);*
- *long duration technical problems with the space object as a result of which*
 - *desired communication with the space object is not possible; and/or*
 - *the orbital position cannot be changed in a normal manner; and/or*
 - *the lifetime is reduced (significantly); and/or*
 - *disruptions of other systems (like other satellites or disruptions on Earth) are caused;*
- *(threatening) collision risks matching the criteria in which JSpOC contacts the operator/owner by phone (an expected collision within 3 days with a maximum miss distance of 500 meter for GEO-satellites and a maximum of 1 km for LEO-satellites, and for LEO-satellites also a probability larger than ~15%);*
- *problems on ground causing problems to the telecommunication with the spacecraft, like*
 - *long duration failure of ground systems (including back-up), such that no communication is possible;*

- *personnel problems, causing not enough (qualified) people to be available for the operational control of the spacecraft. This is also applicable if no operations are planned; a problem can happen at any time.*

Decommissioning

Decommissioning is a general term for a formal process to remove something – in this case a space object - from an active status. A decommissioned satellite is no longer active and can not be reactivated.

1.3.2 Acronyms

Acronym	Explanation
AD	Applicable Documents
IADC	Inter-Agency Space Debris Coordination Committee
ECSS	European Cooperation for Space Standardisation
DRD	Document Requirements Description
GEO	Geostationary Earth Orbit
ISO	International Organisation for Standardisation
JSpOC	Joint Space Operations Center
ITU	International Telecommunication Union
LEO	Low Earth Orbit
OST	Outer Space Treaty
RD	Reference Documents
SAID	Space Activities Information Document
S/C	Spacecraft
TBC	To Be Confirmed
TBD	To Be Detailed
TBW	To Be Written
TM/TC	Telemetry/Telecommand
Wra	Wet ruimtevaartactiviteiten (Dutch: Space Activities Act)

1.4 Document structure

Section 1 of this document provides the introduction.

Section 2 provides a general overview of the mission, satellite(s) and relevant aspects.

Section 3 goes more into the details of technical information and engineering practices.

Section 4 addresses the insurance information.

And finally section 5 provides the overview on the financial situation.

2 General Overview

2.1 Entity description

Describe briefly the entity that is requesting/holding the Wra licence, including shareholders (if any), organizational structure and contact persons, to as deemed relevant for the licence.

Justification: Information as provided with the licence request form is limited and might change over time. Public information might not be up-to-date or not contain the information for the Wra licence (request).

The contact persons relevant for any communication about the licence are

Name E-mail(s) Phone Number(s)	Organization(s) / Function(s) / Location(s)	Role w.r.t. licence

At least the following roles shall be identified:

- *signee of related legal documents;*
- *SAID key contact person(s);*
- *technical contact person(s);*
- *insurance contact person(s); financial contact person(s).*

2.2 Missions and satellites

Which missions and satellites ('space objects') are subject or will become subject to the entity's Wra licence (request)? Please complete the table below. Provide actual / planned data where relevant.

Justification: High-level information about the related space objects. Information will be compared with – and used for update if needed – the registered data (Ref: Wra – Article 11).

Note: Relevant data concerning the space object shall be provided at least six months before start of the space activities. Data concerning the actual launch or decommissioning – or other changes – shall be provided within three weeks. The dedicated registration form shall be used (Ref: Registration Act – Articles 4-6).

The list of registered data can be found on the website of Rijksinspectie Digitale Infrastructuur, see <https://www.rdi.nl/onderwerpen/ruimtevaart/documenten/publicaties/2019/10/31/register-ruimtevoorwerpen>

Some examples are included below (based on open sources). Copy the table if needed for additional satellites. Alternative solutions to provide the information in this document can be discussed.

Identification	Description/name	<Name>		<Name>	
	UN Number				
	COSPAR Number				
	NORAD Number				
General	Mission type / Users				

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Identification	Description/name	<Name>		<Name>	
	Application domain / purpose				
Object	Manufacturer				
	Model				
	Launch mass (kg)				
	Dry mass (kg)				
	Current mass (kg)				
	Dimensions (stowed)				
	Dimensions (during operations)				
	Power source				
	Power (W)				
	Transmission power				
	Attitude control type				
	Orbit control type				
Launch	Launch broker				
	Launch operator				
	Launch site				
	Launch vehicle				
	Launch date				
Orbit	Orbit class				
	Orbit type				
	1) Perigee (km)				
	1) Apogee (km)				
	1) Inclination (°)				
	1) Period (minutes)				
	1) Nodal period (hh:mm)				
	Nominal geo-position				
	Epoch (dd-mm-yyyy)				
	Orbit arrival date				
Communications	Operator and country				
	Downlink freq/rate				
	Uplink freq/rate				
	2) Commanding interval				
	2) Last command exec.				
Disposal	3) Lifetime (design)				
	3) Lifetime (economical)				
	Disposal method				
	Disposal period/date				
Comments					

1) Actual (at epoch) and planned/initial orbit parameters (e.g. 687 (700) km)

2) Planned/current interval for commanding. If commanding is less frequently (> 1 week), include date of last confirmed command execution

3) Design lifetime is estimated lifetime at launch; economical lifetime is until (planned) end of the mission (with active payload).

Remarks with respect to the example table above:

- include planned information, update with actual/current information;
- mission type is e.g. commercial, scientific;
- application type is e.g. telecom, earth observation;
- power: also indicate Begin Of Life/End Of Life if needed.

2.3 Quality System

1 – Describe briefly the entity internal overall Quality control system.

2 – Which Quality Certificate(s) have been received? Please provide a copy (include as annex).

3 – Describe the quality implementation for the space activities as deemed applicable for the licence request.

Justification: A good quality of the activities needs to be secured. A certificate - e.g. ISO 9001:2015 - increases the level of confidence in the entity. If applicable, related quality documentation can be used as Audit References.

(Ref: Wra – Articles 3(3) and 6)

<TBW by entity>

2.4 Standards

Which standards are used during the design/development phase (i.e. ECSS, ISO)?

Justification: A confident design/development of space objects need to be secured. Applying known standards increases the level of confidence in engineering. (Ref: Wra – Articles 3(3) and 6)

<TBW by entity>

2.5 Risks

Which major mission and operational risks (e.g. the safety of persons and goods, protection of the environment in outer space and protection of public order) have been identified for these missions/satellites, and what are the mitigation methods? Has a risk analysis document, or other risks-assessment related files been established? Please provide reference(s).

Justification: A proper analysis of the mission and operational risks improves the awareness and focus on the possible enhancements in the project. (Ref: Wra – Articles 3(1), 6, 10, and 12)

<TBW by entity>

2.6 Personnel and training

How has the operations personnel been certified, qualified, trained, or, have they past-operational experience, within the scope of activities for which the licence is requested?

Justification: Within the scope of activities for which the licence is requested it shall be shown that a training program and certification achievements track-records for each operator are available. This can be internal and/or external education/training/past-experience, with respect to the specific tasks for the mission operations. (Ref: Wra – Articles 4(3a))

<TBW by entity>

2.7 Incidents

- 1 – Which type of incidents have been identified that corresponds to the category of disasters?
- 2 – What are the steps to be taken (contingencies)?
- 3 – What is the procedure to notify RDI as soon as possible?
- 4 – Which information will be/has been provided and how?

Justification: The Wra states: “If an incident occurs or has occurred (...) the licence-holder shall, without delay, take (...) steps (...) and notify Our Minister (...).” (Ref: Wra – Article 10).

<TBW by entity>

Ad 3) An anomaly handling and contingency procedure shall be provided and referenced in the SAID.

2.8 Restrictions

1 - Which restrictions (e.g. ITAR) are identified that could impact the evaluation of the licence request and/or the supervision activities?

2 – Which methods are proposed to reduce the impact?

Justification: Any major restrictions should be known in advance such that the impact can be assessed and alternatives investigated.

<TBW by entity>

3 Engineering

3.1 General

3.1.1 Design approach

- 1 – Which design drivers are most critical?
- 2 – What is the applied level of redundancy?
- 3 – Which components will fly in space for the first time?
- 4 – What is the applied level of testing/verification of hardware and software components?

Justification: to achieve confidence about the level of quality of design of the foreseen space object in relation to the expected lifetime. Ref: Wra – Articles 3, 6 and 7.

<TBW by entity>

3.1.2 Space debris

- 1 – Which space debris mitigation requirements (e.g. ISO 24113 or similar) have been implemented?
- 2 – Which space debris mitigation measures have been or will be taken to avoid the increase of space debris, e.g. to plan for a graveyard orbit for GEO satellites and de-orbiting within 25 years for LEO satellites?
- 3 – By which authorities has a Space Debris Mitigation Plan been approved?

Justification: Space objects shall minimize the increase of Space Debris and whenever possible mechanisms shall be implemented to remove/transfer space objects to orbits where the debris impact is minimized. (Ref: Wra – Articles 3 (3(b, 3f), 6, and 7).

As a member State of the Committee on the Peaceful Uses of Outer Space, the Netherlands fully adheres to the Space Debris Mitigation Guidelines of the Committee, IADC Space Debris Mitigation Guidelines, ITU Recommendation ITU-R S.1003, the European Code of Conduct for Space Debris Mitigation and the ISO Standards.

<TBW by entity>

3.1.3 Structure (mission and launch)

Which structural integrity analyses and vibration tests are foreseen or have been performed such that during the mission activity no objects are separated from the space object?

Justification: All parts of the space object require to be mounted in such a way that these parts will not (un-)intentionally get separated during the activity. Environmental accelerations and/or vibrations, resulting from e.g. the propulsion, acoustic, aerodynamic, thermal-shock, are calculated and tested at a vibration test bench. All this is done in order to verify and validate the space object passes these actual vibration tests. (Ref: Wra – Articles 3 (3), 6 and 7).

<TBW by entity>

3.2 Flight operation

3.2.1 Operational concept / operations

Summarize the operational concept. How are your operations organized? Does an operations plan exist, e.g. frequency of contact with satellite, data/telemetry collection, commanding windows, etc.

Justification: The operational concept provides an indication of the communication possibilities with the satellite. Next to the normal operational control also a fail-safe mechanism needs to be implemented, such that a pre-mission defined activity plan can be followed when ground-to-space control is (temporarily) lost. (Ref: Wra – Articles 3 (3), 4 (3b) 6 and 7)

<TBW by entity>

3.2.2 Communication

- 1 – Preliminary to executing space activities international orbit and frequency rights have to be obtained at the ITU. Under which name(s) and ID number(s) is/are the satellite(s) known at the ITU.
- 2 – Which telecommand and telemetry control system will be/is used for the entire period of the mission activity, in order to be able to send control-commands as well as receive operational data during the flight?

Justification: Prior to the mission the timestamps, time-intervals, and time periods when TM/TC-communication will take place need to be planned. (Ref: Wra – Articles 3(3), 4 (3b), 6 and 7 and Order in Council for non-steerable satellites Article 1, Outer Space Treaty Article VI)

<TBW by entity>

3.2.3 Dutch control

The main mission control centre is in the scope of the Wra seen as “primary”; a back-up or second mission control centre (in The Netherlands) is referred to as “secondary steering wheel”.

In case the primary mission control is done from The Netherlands:

- 1 – Where is the mission control centre located?
- 2 – How is the mission control implemented?
- 3 – How is continuing supervision of the space activities from Dutch territory guaranteed?
- 4 – If radio amateur frequency bands are used for operating the satellite(s), whom within your origination is/are the radio amateurs (incl. radio identification / call sign) that is/are authorized for using this specific radio communication spectrum?

In case the primary mission control shall be/is handed over from another country to a secondary steering wheel in The Netherlands:

- 1 – Where is the mission control centre located?
- 2 – How can the control from another country be disabled so that the Radiocommunications Agency can comply with the international obligations of continuous supervision of the authorised space activity from Dutch territory?
- 3 – What has been implemented to avoid that conflicting commands are given between/from the two mission control countries?
- 4 – How often is the operations room in The Netherlands and/or handover from another country used/tested?

Justification: In case applicable to the activity: It shall be possible to take/give over the control of the satellites from/to another country to/from The Netherlands, if required by Dutch Government.

(Ref: Wra – Articles 3(3), 4(3b), 6 and 7 and Order in Council for non-steerable satellites Article 1, Outer Space Treaty Article VI)

<TBW by entity>

3.2.4 Power system

Describe the power system. How is the space object been equipped with electrical energy supplies (e.g. solar panels, batteries, etc.) in order to sustain the communication link during the mission activity?

Justification: The electrical energy balance needs to be established prior to the mission, related to the maximum power consumption. Also, a fail-safe mechanism needs to be implemented for communication link availability. (Ref: Wra – Articles 3(3), 4 (3b), 6 and 7 and Order in Council for non-steerable satellites Article 1, Outer Space Treaty Article VI)

<TBW by entity>

3.2.5 Security

Which major security measures and control mechanism as well as security procedures are being used?

Justification: The area from which the activity is performed shall be sufficiently secured against unauthorised access, as well as all communications with the satellite.
(Ref: Wra – Articles 3(3), 4(3b), 6 and 7 and Order in Council for non-steerable satellites Article 1, Outer Space Treaty Article VI)

<TBW by entity>

3.3 Guidance

3.3.1 Orbit control / propulsion

Describe the orbit control / propulsion system. How has the satellite been provided with an adequate propulsion system with a sufficient amount of energy, in order to keep/hold the defined position and/or flight-trajectory?

Justification: The propulsion mass / energy balance related to the defined trajectory needs to be established prior to the mission. The propulsion consumption during the mission needs to be administrated (not at launch). (Ref: Wra – Wra – Articles 3(3), 4 (3b), 6 and 7 and Order in Council for non-steerable satellites Article 1, Outer Space Treaty Article VI)

<TBW by entity>

3.3.2 Orbit determination

How will the actual orbit be determined, and how accurate is the position of the satellite known at each moment in time?

Justification: Continuous determination of the object, its position and trajectory speed (in orbit) is of imminent importance for the verification of the actual flight-path.
(Ref: Wra – Articles 3(3), 4 (3b), 6 and 7 and Order in Council for non-steerable satellites Article 1, Outer Space Treaty Article VI)

<TBW by entity>

3.3.3 Collision avoidance

Which measures have been (or will be) taken, such that danger of collision with other objects is prevented during the space activities?

Justification: Prior to the start of a change in trajectory or orbit, the danger of collision with other objects or known space debris shall be assessed. Collision avoidance measures shall be taken accordingly. (Ref: Wra – Articles 3(3), 4 (3b), 6 and 7 and Order in Council for non-steerable satellites Article 1, Outer Space Treaty Article VI))

<TBW by entity>

4 Insurance

4.1 Ownership

- 1 - Who is the owner of the satellite(s)?
2 - Is there any transfer of ownership planned, if so when, how and under what conditions is the transfer taking place?

Justification: The ownership of the satellites shall be known (in advance) at all times.
(Ref: Wra – Article 3(4))

<TBW by entity

Identification satellite	Owner, registered in [country]	Name of new owner and registered place of business	Date (planned) of legal transfer	Other details of (planned) transfer
<name of the satellite>	<Your company name, NL			

4.2 Insurance coverage

- How has third party liability been covered, both for launch and subsequent space activities?
- 1 – Provide information about the insurance contract (preferably with a "Certificate of Insurance"), including the name of the insurer(s); the coverage; the amount of coverage; the insurance period, etc. (if the insurance during launch is part of the launch contract, provide information about the contract of the launching entity).
- 2 – Provide indication of the Dutch government as 'additional insured'.
- 3 – Provide proof that the insurance premium has been paid.

Justification: Insurance must adequately cover liability for damage to third parties.
(Ref: Wra – Articles 3(4) and 7, and licence request form section 8.3)

<TBW by entity>

Document Requirements Description for Wra Space Activities Information Document
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Information about insurance during launch shall be provided for spacecraft that have not been launched yet, and for spacecraft for which this information has not been provided before (in case the spacecraft has been launched and the updated SAID is provided afterwards).

Launch phase	
Spacecraft(s)	
Insurance broker	
Insurer(s)	
Coverage	
Amount of coverage	
Insurance period	
Additional insured	
Premium paid (date)	
Certificate of Insurance	

In-orbit phase	
Spacecraft(s)	
Insurance broker	
Insurer(s)	
Coverage	
Amount of coverage	
Insurance period	
Additional insured	
Premium paid (date)	
Certificate of Insurance	

<u>Launch phase</u>	<i>Insurance broker</i>	<i>Insurer(s)</i>	<i>Coverage</i>	<i>Amount of coverage</i>	<i>Insurance period</i>	<i>Additional insured</i>	<i>Premium paid (date)</i>
<i>S/C (to be launched)</i>							
<Name of the satellite>							

<u>In-orbit phase</u>	<i>Insurance broker</i>	<i>Insurer(s)</i>	<i>Coverage</i>	<i>Amount of coverage</i>	<i>Insurance period</i>	<i>Additional insured</i>	<i>Premium paid (date)</i>
<i>Spacecraft</i>							
<name of the satellite>							

Certificate of insurance will be provided on request during audits.

4.3 Third Party Liability provisions

In case of purchase of the satellite(s) from a third party, provide information concerning sales contracts provisions about damage to third parties.

Justification: The clauses of the main sales contracts that could impact the liability of the Dutch Government must be verified. (Ref: Wra – Chapter 2, Article 3(4))

<TBW by entity>

4.4 Anomalies and claims

Indicate how anomalies (e.g. malfunctioning such as loss of communication, without insurance claim) and insurance claims (if any) have been clarified?

Justification: These can have an impact on the liability exposure for the Dutch government.
(Ref: Wra – Chapter 2, Article 3(4))

Note: This section only relates to anomalies that have occurred in the past (if any).

<TBW by entity>

4.5 Financial covenants

In case of purchase of the satellite(s) from a third party, provide information about financial covenants (if any).

Justification: Financial covenants may include requirements related to space insurance.
(Ref: Wra – Article 3(4))

<TBW by entity>

5 Financial

5.1 Solvability & profitability

Provide the financial information as defined in the licence request form section 8.4, including information about the solvability, liquidity and financial healthy profitability for the entity for upcoming (mission) period. If the entity (e.g. a foundation, etc.) has no legal obligation to yearly create these financial documents, at least the existing legal duty of balance sheets and overview of profits/expenditures of the last fiscal (most actual) year shall be provided. Also provide a (short) explanation/description with the provided financial information (not only tables with figures and numbers).

Justification: According to Wra the financial stability of the entity shall be sound and solid. (Ref: Wra – Article 3(3c), and licence request form section 8.4)

<TBW by entity>

5.2 Business risks

Describe the business risks and how these risks are controlled by the entity for the period of the space mission. E.g. a business plan should be available, where relevant business risks have been analysed.

Justification: Assessed business risks with high/moderate risk and/or impact shall be controlled by the entity. (Ref: Wra – Article 3(3c))

<TBW by entity>

5.3 Internal control

Describe how financial internal control is performed and established within the entity.

Justification: The internal control of the entity shall be properly developed and adequately working, to mitigate financial risks. (Ref: Wra –Article 3(3c))

<TBW by entity>

6 Feedback and other information

Does the licence requester/holder have any feedback on topics which are important but have not been addressed in other sections of this document?

Justification: Relevant for future audits and DRD/SAID updates.

<TBW by entity>

End of document.