Council of the European Union
General Secretariat

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Interinstitutional files:
2025/0335 (COD)

Brussels, 05 December 2025

WK 16592/2025 INIT

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WORKING DOCUMENT

From:	General Secretariat of the Council
To:	Working Party on Civil Protection (CER) Horizontal Working Party on Cyber Issues Working Party on Space
Subject:	EU Space Act: MS comments on Title II (art. 10+15), IV (chapt.I: art. 58-74), VII (art. 113-119) and Annexes I-VI, IX and X (deadline 14/11/2025)

Space Act: Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)
From: AT, CZ, EL, ES, FI, FR, IE, IT, LU, MT, NL, PL, PT, SE

Deadline: ***Friday 14 November 2025 cob***
Updated: 19/11/2025 13:05

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
General Comments	[redacted]

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
Title II **AUTHORISATION AND REGISTRATION FOR SPACE ACTIVITIES**	[redacted]

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
Chapter I **AUTHORISATION OF UNION SPACE OPERATORS**	[redacted]

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Article 10

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[redacted]

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
Light regimes	

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
1. The conditions for authorisation referred to in Article 6(1) shall be adapted for the Union space operators referred to in paragraphs 2, 3 and 4, as provided for in these paragraphs.	

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
2. Space operators that are research or education institutions or that carry out research space missions shall comply with the requirements of Title IV, Chapter I, Section 2, as set out in Article 62.	[redacted]
3. Entities applying a simplified risk management shall comply, as regards Title IV, Chapter II, with the provisions of Article 79(1), first subparagraph, only in relation to critical assets and critical functions.	[redacted]

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
4. When space operators that are small-sized enterprises or are research or education institutions carry out In-Orbit Demonstration and Validation (IOD/IOV) space missions, they shall be exempted, in relation to Title IV, Chapter III, from the obligation referred to in Article 96(2).	[redacted]

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]

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Chapter III
SPACE SERVICES PROVIDERS FROM THIRD COUNTRIES AND INTERNATIONAL ORGANISATIONS

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[redacted]

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
[redacted]	
Article 15	
Rules applicable to third country space operators	[redacted]

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
1. Third country spacecraft operators shall be subject to the requirements applicable to the Union spacecraft operators laid down in Articles 62, 66, 67, 69 to 73, 75 to 92, and 96 to 100.	[redacted]

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
In addition, third country spacecraft operators shall:	[redacted]
(a) subscribe to a public or commercial collision avoidance space services provider;	[redacted]
(b) ensure that the collision avoidance space services provider referred to in point (a), has the technical means to assess the collision avoidance and complies with the requirements laid down in point 1, of Annex IV;	[redacted]
(c) notify to the Agency, in the application for registration in URSO, the name and details of the collision avoidance space services provider referred to in point (a).	[redacted]

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
The Agency shall add the information referred to in point (c), in the Union contact list database referred to in Article 67(1).	
2. Third country launch operators and third country launch site operators shall be subject to the requirements applicable to the Union launch operators and launch site operators laid down in Articles 61, 75 to 92, and 96 to 100.	

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
3. Third country ISOS providers shall be subject to the requirements applicable to the Union ISOS providers laid down in Article 101.	

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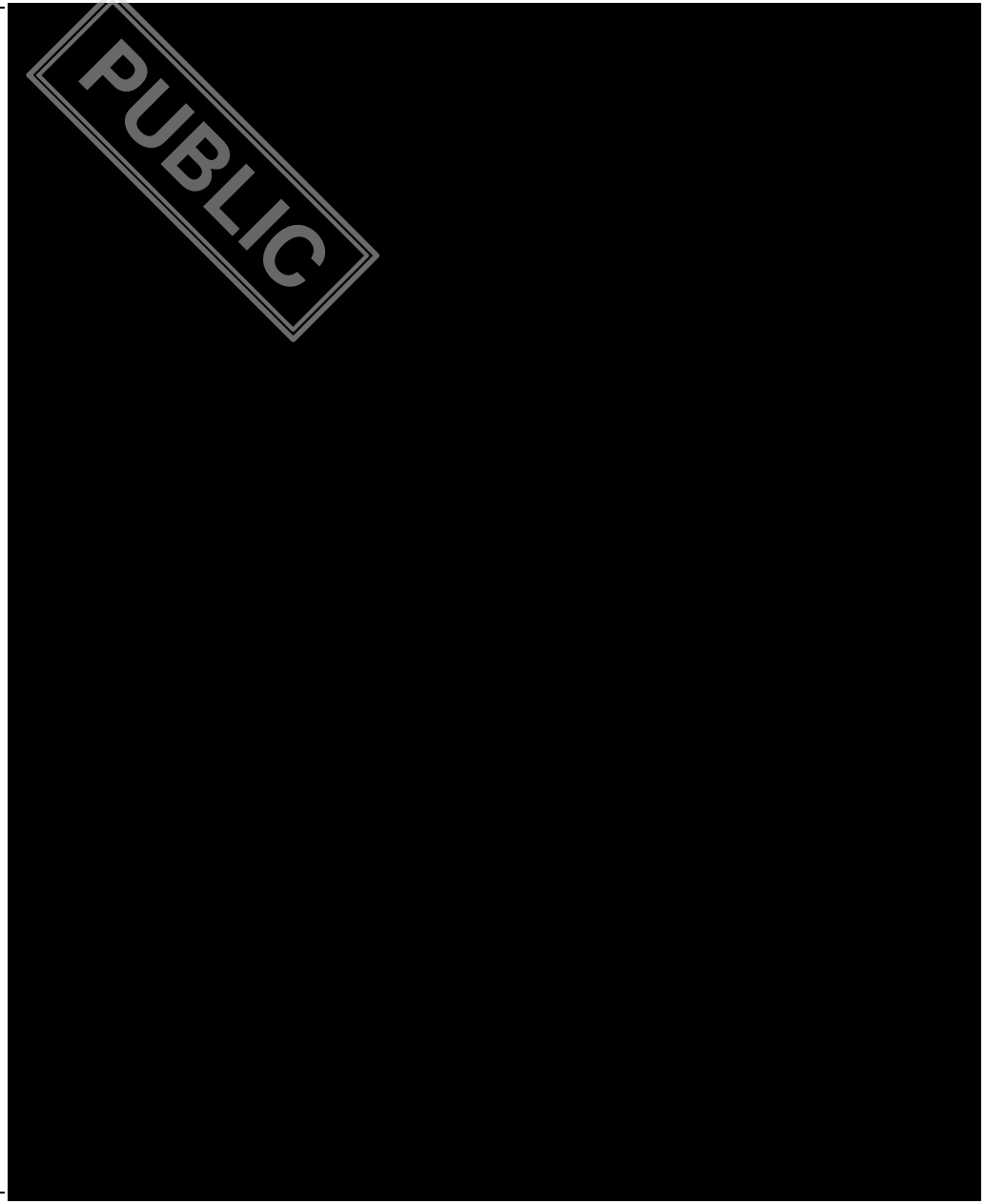
Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
4. Third country collision avoidance space services providers shall be subject to the requirements applicable to the Union collision avoidance space services providers laid down in Articles 102 and 103.	
Title IV **TECHNICAL RULES**	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
Chapter I **SAFETY AND SUSTAINABILITY IN SPACE**	[redacted]

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SECTION 1
LAUNCHERS



Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
Article 58	
Launch Safety Plan	[redacted]
The Union launch operator shall submit to the competent authority a Launch Safety Plan in accordance with point 3, of Annex I.	[redacted]

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
Article 59	[redacted]
Safety and coordination measures during launch and re-entry	
1. Union launch operators shall take appropriate measures to mitigate the risk of collision between the launcher and aircraft, maritime vessels or spacecraft, and debris in orbit, during the launch and re-entry phases.	[redacted]

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
2. The mitigation measures referred to in paragraph 1 shall include:	[redacted]
(a) the implementation of the coordination requirements laid down in point 1.1, of Annex I with the competent authorities regarding air traffic services, the collision avoidance space services provider and the air traffic service providers that could be impacted.;	[redacted]

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
(b) the performance of a risk assessment - the Launch Collision Avoidance ('LCOLA') - in accordance with point 1.2, of Annex I, and the implementation of the launch closure window accordingly;	[redacted]

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
(c) the calculation and limitation of the casualty risk at launch and re-entry, in accordance with point 1.3, of Annex I.	[redacted]
3. The Commission shall, by means of implementing acts:	[redacted]

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
(a) develop the method to calculate the LCOLA, based on the probability of collision which shall be adapted depending on the object of interest size, and on whether the spacecraft is habitable or active;	[redacted]
(b) select, among existing methods, and develop, a new method for the calculation of the collective risk for casualties due to launch and re-entry, with due consideration for the following elements:	[redacted]

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
(i) all the phenomena leading to a risk of catastrophic damage (ascent phase, fallout from stage after separation, re-entry into the atmosphere of a deck put into orbit, recovery phase of a reusable deck);	
(ii) pre-fragmentation trajectories (atmospheric or in outer space), depending on the flight times and faults considered;	
(iii) the corresponding fragmentation and debris generation scenarios, at the re-entry or at the moment of neutralisation of the launch vehicle and the return to Earth of any element of the launcher;	
(iv) the dispersion on the ground of the debris and the evaluation of the effects thereof;	
(v) the reliability of the launch vehicle for the launch phase, including, where applicable, during the recovery phase;	
(vi) the reliability of the deorbiting manoeuvre of the launcher element put into orbit, in the case of controlled re-entry;	

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
(c) establish the thresholds for the casualty risks, in accordance with point 1.3, point (b), of Annex I, for the mentioned risk scenarios;	
(d) set up the minimum coordination requirements between the Union launch operator, the collision avoidance space services provider, the competent authorities and traffic services providers to assess the impact of launch operations on other air traffic services during the launch and re-entry phases and to minimise the disruption.	[redacted]
Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 114(2).	
Article 60	
Flight safety system	[redacted]

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
1. Launch vehicles shall either incorporate tracking devices or establish means of tracking that enable real-time monitoring of the launch vehicle position and of velocity.	
2. Launch vehicles shall incorporate at least a telemetry data transmitting system for monitoring the launch vehicle performance data, except where the pre-flight analysis establishes that the flight of the launch vehicle will not result in an unknown and hazardous impact area of dispersion.	
3. Union launch operators shall conduct a risk assessment to identify potential risk scenarios and implement mitigatory measures, in accordance with point 2.1, of Annex I.	[redacted]
4. Union launch operators shall add an on-board system for the neutralisation of the launcher, in accordance with point 2.2, of Annex I.	[redacted]

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
[redacted]	[redacted]
Article 61	
Space debris mitigation for launchers	[redacted]
1. Union launch operators shall limit debris creation through the implementation of the following measures:	[redacted]

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
(a) limitation of planned release of debris into Earth, during nominal operations, through the implementation measures set out in point 1.1, of Annex II;	[redacted]
(b) protection against accidental fragmentation, through the implementation measures set out in point 1.2, of Annex II and point 1.3, of Annex II;	
(c) end-of-life disposal, in accordance with point 2, of Annex II.	[redacted]

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
2. Union launch operators shall submit the following space debris mitigation plans:	[redacted]
(a) a debris control plan, in accordance with the technical and operational requirements laid down in point 3.1, of Annex II;	
(b) an end-of-life disposal plan, in accordance with point 3.2, of Annex II.	
3. The Commission shall, by means of implementing acts:	[redacted]

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
(a) establish the time period for when a launch vehicle deployed in Low Earth Orbit (LEO) shall be disposed, in accordance with point 1.1.1, point (e), of Annex II, including specific measures for the pyrotechnic system and the solid or hybrid propellant;	
(b) establish the safe region and time for disposal of launch vehicles deployed in Medium Earth Orbit (MEO), in accordance with point 1.1.1, point (d), of Annex II, including specific measures for the pyrotechnic system and the solid or hybrid propellant;	
(c) establish the threshold of probability of the risk of accidental fragmentation in orbit due to internal causes point 1.2.1, of Annex II;	
(d) establish the duration and the threshold of the risk of fragmentation due to collision in accordance with point 1.3, of Annex II;	
(e) develop the conditions for design of the launch vehicle for demise for atmospheric re-entry and uncontrolled re-entry referred to in point 2.2, point (b)(ii), of Annex II; and	
(f) develop the calculation method of the probability of successful disposal and the percentage threshold referred in point 2.5, of Annex II.	

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 114(2).	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
SECTION 2 **SPACECRAFT**	[redacted]

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
Article 62	[redacted]
Special regime for research and education spacecraft	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
1. Union spacecraft operators of research and education missions, are exempted from the requirements laid down in:	
(a) Article 66, for research spacecraft intended to be placed in an orbit above the limit prescribed in that Article and below 600 km, where:	

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
(i) a trackability system enables a precise positioning of the spacecraft and;	

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
(ii) the relevant space mission documents demonstrated why manoeuvrability capabilities were not retained;	[redacted]
(b) Article 72, for spacecraft intended to remain in orbit less than one year;	
(c) point 2.3, of Annex IV;	
(d) point 2.5, of Annex IV;	
(e) Point 1.2.1, point (e)(iv), of Annex V;	

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
(f) Point 4.3, point (f)(iii), of Annex V.	
For the purposes of point (c), of the first subparagraph, a contact point shall be available to respond in a reasonable operational time for LEO/MEO/GEO.	
For the purposes of point (d), of the first subparagraph, the Union spacecraft operator of the research spacecraft may request the Union collision avoidance space services provider referred to in Article 64(1) to assist in the delivery of its spacecraft ephemerides and covariances.	

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
For the purposes of point (e), of the first subparagraph, an obligation of redundancy shall take into consideration the technical limitations linked to the size of the spacecraft.	
2. The exceptions referred to in paragraph 1 shall be assessed on a case-by-case basis, by taking into consideration the size and the weight of the spacecraft, and the duration and orbit of the mission.	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
Article 63	
Trackability	[redacted]

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
1. Union spacecraft operators shall ensure that a spacecraft possesses the technical means to allow trackability and precise determination of the orbital position, in accordance with point 1, of Annex III.	[redacted]
Union spacecraft operators shall ensure that systems at the ground segment are able to process data in an existing recognised data format, in accordance with point 2, of Annex III.	
2. The Commission shall, by means of implementing acts, specify the level of precision required for the trackability of spacecraft, as referred to in point 1.1, of Annex III. That implementing act shall be adopted accordance with the examination procedure referred to in Article 114(2).	[redacted]

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
Article 64	[redacted]
Collision Avoidance (CA)	[redacted]

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
1. Union spacecraft operators shall subscribe to the CA space services provided by the collision avoidance space services provider in charge of the	[redacted]

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
Space Surveillance and Tracking (SST) sub-component referred to in Article 58(2) of Regulation (EU) 2021/696 ('Union CA space services provider').	[redacted]

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
2. The subscription referred to in paragraph 1 shall cover all phases of a space mission, including orbit raising, ISOS and end of life phases, with the exclusion of the re-entry phase.	
3. During operation, Union spacecraft operators shall inform without delay the Union CA space services provider of any of the following:	[redacted]

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
(a) any planned changes to the operation;	
(b) the decision to start the disposal phase and to initiate the end-of-life phase, by providing the relevant information three months in advance from the date of the start of the procedure;	
(c) any unplanned changes to the operations, including regarding problems encountered during the lifetime of the space mission and the disposal phase, that would impact compliance to this Regulation, without undue delay.	

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
4. Union spacecraft operators shall comply with the requirements laid down in point 2, of Annex IV, and shall cooperate with the Union CA space services provider, in accordance with the requirements therein.	[redacted]
5. Upon receipt of a high interest event alert, Union spacecraft operators shall inform without delay the Union CA space services provider of all actions taken to avoid the collision, in accordance with point 2, of Annex IV.	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
Article 65	
Re-entry services	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
1. Union spacecraft operators shall send the necessary data and information, such as positioning, state of the spacecraft, possibility to communicate, to enable a more accurate re-entry service to the Union CA space services provider referred to in Article 64(1), without prejudice to the	

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
transmission to the entity in charge of re-entry service in the Space Surveillance and Tracking (SST) sub-component referred to in Article 58(2) of Regulation (EU) 2021/696.	[redacted]
2. The entity in charge of re-entry service referred to in paragraph 1 shall ensure the necessary coordination with the relevant authorities and air traffic services providers to minimise the impact of the re-entry on other traffic services.	

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
Article 66	
Spacecraft manoeuvrability	
1. Union spacecraft operators shall ensure that a spacecraft is designed, produced, and operated in a way that allows the spacecraft to have and enable manoeuvrability capabilities for orbits with an apogee above 400 km.	

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
2. The manoeuvrability capability referred to in paragraph 1 shall at least:	

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
(a) comply with the requirements set out in point 2, of Annex IV, and allow to respond to a high interest event alert, in accordance with Article 64(5);	[redacted]
(b) enable the performance end-of-life disposal in accordance with Article 70(1), point (c);	
The ground segment shall be capable of receiving orbital forecasts and process data in accordance with point 2, of Annex III.	
Article 67	
Contact list database for high interest event alerts	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
1. The Agency shall set up and manage a Union contact list database for high interest event alerts ('contact list database').	
2. Union spacecraft operators shall report to the Agency the contact details of their relevant staff in charge of collision avoidance and re-entry	

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
activities, for inscription by the Agency into the contact list database established in accordance with paragraph 1.	[redacted]
3. The Agency shall share the contact list database with the Union collision avoidance space services provider referred to in Article 64(1).	
Article 68	
Orbital traffic rules	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
1. Union spacecraft operators shall comply with the orbital traffic and coordination requirements laid down in point 2, of Annex IV.	
2. The Commission shall, by means of implementing acts, adopt rules specifying the collision avoidance requirements laid down in point 2, of Annex IV.	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 114(2).	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
Article 69	
Positioning in orbit	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
1. Before launch, Union spacecraft operators shall analyse the choice of orbit and shall give reasons for that choice.	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
Union spacecraft operators shall select the orbit based on an analysis taking into account the existing spacecraft and the debris in orbits.	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
2. The Commission shall, by means of implementing acts, develop:	
(a) specific methods of calculating the congestion of LEO, MEO and GEO;	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
(b) methods to calculate the selection of the orbit, on the basis of recognised and state of the art methods.	
Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 114(2).	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
Article 70	[redacted]
Space debris mitigation	
1. Union spacecraft operators shall take the following measures:	

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
(a) limitation of planned generation of debris into Earth, during nominal operations, in accordance with point 1.1, of Annex V;	
(b) limitation of risk of accidental fragmentation, in accordance with point 1.2, of Annex V and point 1.3, of Annex V;	
(c) completion of the end-of-life disposal, in accordance with point 3, of Annex V;	
(d) implementation of a failure response plan, in accordance with point 4.3, of Annex V;	
(e) ensuring the reliability of the design, in accordance with point 2.1, of Annex V; and	
(f) setting-up the operational procedures for the quality and reliability control, in accordance with point 2.2, of Annex V.	
2. Union spacecraft operators shall draw up the following space debris mitigation plans and shall demonstrate fulfilment of the requirements laid down in paragraph 1:	

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
(a) a debris control plan, in accordance with point 4.1, of Annex V;	[redacted]
(b) an end-of-life disposal plan, in accordance with point 4.2, of Annex V;	
(c) a failure response plan, in accordance with point 4.3, of Annex V.	
3. The Commission may, by means of implementing acts:	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
(a) develop the measures to limit the generation of debris, by restricting projected releases of debris by numbers and duration in orbit, including specific rules for pyrotechnic devise and solid rocket motors design as referred to in point 1.1, of Annex V;	
(b) develop measures to limit risk of fragmentation to:	
(i) limit the internal causes of fragmentation and the risk of collision referred to in point 1.2.1, point (a), of Annex V;	
(ii) develop the design and manufacture requirements to limit the risk of fragmentation due to collision referred to in point 1.3, points (a) and (b), of Annex V;	
(iii) develop the method to calculate the probability of collision and the threshold referred to in point 1.3, points (c) and (d), of Annex V;	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
(c) specify the end of life measures by:	
(i) determining the threshold for the probability of successful disposal and the method for calculation referred to in point 3.1.2, of Annex V and point 3.1.3, of Annex V;	
(ii) defining the maximum orbital lifetime in LEO before re-entry, referred to in point 3.4.2, of Annex V;	
(iii) developing the requirements related to re-entry for LEO, referred to in point 3.5.4, of Annex V, point 3.5.6, of Annex V and point 3.5.8, of Annex V;	
(iv) setting out the specific requirements for re-entry for MEO, referred to in point 3.6, of Annex V;	
(d) specify the technical conditions for soft passivation referred to point 1.2.1, point (e)(v)(2), of Annex V, and for passivation for re-entry referred to in point 1.2.1, point (f), of Annex V;	

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 114(2).	
4. The Commission is empowered to adopt delegated acts in accordance with Article 113 to amend the order of preference laid down in point 3.3, of Annex V, in order to reflect and adapt such order to the technological progress as regards ISOS.	
Article 71	
Mission extension	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
1. Where a Union spacecraft operator wishes to extend a space mission, that Union spacecraft operator shall submit to the competent authority a request to extend a space mission, at the latest 3 months before the planned end of the concerned space mission.	[redacted]
2. Upon request submitted in accordance with paragraph 1, the competent authorities may decide to extend the duration of a space mission carried out by a Union spacecraft operator beyond the period for which the initial authorisation has been granted.	
3. Competent authority shall approve the request for the extension of the space mission if the spacecraft still meets the requirements laid down in Annex V.	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
Article 72	[redacted]
Light and radio pollution	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
1. Union spacecraft operators shall establish a plan containing measures that are adequate to limit light and radio pollution in accordance with paragraph 2.	
2. The visual magnitude for spacecraft during the entire lifetime, including the design requirements on low reflectivity coating or shielding, shall be at least 7 magnitude.	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
The plan referred to in paragraph 1 shall include all of the following elements:	
(a) a description of the technical and operational measures implemented by the Union spacecraft operator to reduce the visible brightness of the	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
spacecraft and to minimise the impact of satellites on astronomical observations;	[redacted]
(b) a description of the technical and operational measures implemented by the Union spacecraft operator to limit disruptions for radio astronomy observatories and to minimise the impact of satellites on astronomical observations.	
Article 73	
Constellations	
1. Union spacecraft operators of a constellation, a mega-constellation or a giga-constellation shall:	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
(a) ensure that each individual spacecraft has a propulsion system;	
(b) maintain at the ground segment a catalogue of the individual spacecraft trajectories and perform on a daily basis collision risk screenings;	
(c) ensure the safety in accordance with the requirements laid down in point 1, of Annex VI, as regards intra-constellation collision avoidance measures;	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
(d) comply with the additional reporting obligations referred to in point 2, of Annex VI.	[redacted]
2. Union spacecraft operators of a mega-constellation or a giga-constellation shall:	
(a) take into consideration, for the choice of the orbit, the following elements:	
(i) the full constellation deployment's impact on the orbit congestion;	
(ii) before choosing the orbit, existing constellations in orbit;	
(iii) ensure that the orbit chosen does not collocate with other space object implying a high number of recurrent and systematic conjunction situations;	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
(iv) the total number of collision avoidance manoeuvres expected during the lifetime of the satellite constellation.	
(b) limit the consequences of dead-on arrival spacecraft, by injecting spacecraft at an orbit:	
(i) that allows a short re-entry period of the spacecraft;	
(ii) where there are limited collision risks.	
(c) ensure that the requested probability of successful disposal referred to in Article 70(1), point (c), is proportionate to the number of spacecraft;	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
(d) ensure that the time spent in orbit after the end-of-life is lower compared to the one laid down in Annex V.	
3. Union space operators of a giga-constellation shall provide to the competent authority, during the spacecraft design and operation, a plan evidencing the availability of propellant necessary to tackle the high number of manoeuvres related to the anticipated number of required collision avoidance.	
4. The Commission shall, by means of implementing acts:	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
(a) specify the risk of intra-constellation collision, in accordance with point 1.2, point (c), of Annex VI;	
(b) limit light and radio pollution, in accordance with point 2.1, of Annex VI.	
Those implementing acts shall be adopted in accordance with the examination procedure referred to in Article 114(2).	
Article 74	
Applicability of product requirements	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
In their contracts concluded with supplier manufacturers, Union space operators shall ensure the conformity of contracted space objects or, as applicable, conformity of components, with the design and the manufacturing requirements as laid down in this Chapter.	

PUBLIC

Title VII
TRANSITIONAL AND FINAL PROVISIONS

PUBLIC

[redacted]

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
Article 113	
Exercise of the delegation	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
1. The power to adopt delegated acts is conferred on the Commission subject to the conditions laid down in this Article.	
2. The power to adopt the delegated acts referred to in Article 41(3), Article 44(3), Article 56(9), first subparagraph, Article 70(4), Article 78(3), Article 79(4), Article 82(4), Article 83(5), Article 84(5), Article 85(4), Article 86(4), Article 92(4), Article 93(7), second subparagraph, Article 101(4), first subparagraph, and Article 109(2), second subparagraph, shall be conferred on the Commission for an indeterminate period of time from 1 January 2027.	
3. For each delegated act referred to in paragraph 2, the Agency, after carrying out public consultations, shall submit to the Commission formal technical opinions by 1.7.2028. For matters covered by Title IV, Chapter II, the Agency shall consult ENISA.	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
4. The delegation of power referred to Article 41(3), Article 44(3), Article 56(9), first subparagraph, Article 70(4), Article 78(3), Article 79(4), Article 82(4), Article 83(5), Article 84(5), Article 85(4), Article 86(4), Article 92(4), Article 93(7), second subparagraph, Article 101(4), first	

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
subparagraph and Article 109(2), second subparagraph, may be revoked at any time by the European Parliament or by the Council.	[redacted]
A decision to revoke shall put an end to the delegation of the power specified in that decision. It shall take effect the day following the publication of the decision in the Official Journal of the European Union or at a later date specified therein. It shall not affect the validity of any delegated acts already in force.	
5. Before adopting a delegated act, the Commission shall consult experts designated by each Member State in accordance with the principles laid down in the Interinstitutional Agreement of 13 April 2016 on Better Law-Making.	
6. As soon as it adopts a delegated act, the Commission shall notify it simultaneously to the European Parliament and to the Council.	
7. A delegated act adopted pursuant to Article 41(3), Article 44(3),Article 56(9), first subparagraph, Article 70(4), Article 78(3), Article 79(4), Article 82(4), Article 83(5), Article 84(5), Article 85(4), Article 86(4), Article 92(4), Article 93(7), second subparagraph, Article 101(4), first subparagraph and Article 109(2), second subparagraph, shall enter into force only if no objection has been expressed either by the European Parliament or by the Council within a period of 2 months of notification of that act to the European Parliament and to the Council or if, before the expiry of that period, the European Parliament and the Council have both informed the	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
Commission that they will not object. That period shall be extended by 2 months at the initiative of the European Parliament or of the Council.	[redacted]
Article 114	
Committee procedure	
1. The Commission shall be assisted by a committee. That committee shall be a committee within the meaning of Regulation (EU) No 182/2011.	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
2. Where reference is made to this paragraph, Article 5 of Regulation (EU) No 182/2011 shall apply.	[redacted]
3. Where reference is made to this paragraph, Article 4 of Regulation (EU) No 182/2011 shall apply.	
4. The Committee shall meet in specific different configurations as follows:	
(a) Safety configuration;	
(b) Resilience configuration;	
(c) Environmental sustainability configuration;	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
(d) ISOS configuration;	
(e) Space-based data configuration.	
5. In accordance with the international agreements concluded by the Union, the representatives of third countries or international organisations may be invited as observers in the meetings of the Committee under the conditions laid down in its rules of procedure, taking into account the security of the Union.	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
Article 115	
Professional secrecy	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
1. Any confidential information received, exchanged or transmitted pursuant to this Regulation, by any person, body, or authority referred to in paragraph 2, shall be subject to the condition of professional secrecy, as laid down in paragraphs 2 and 3.	
2. Without prejudice to the exchange and use of information in accordance with this Regulation, an obligation of professional secrecy shall apply to all persons who work or who have worked for the Commission, the Agency, the competent authorities, or a qualified technical body for space activities, an authority, a natural or legal person to whom the competent authorities or the qualified technical bodies for space activities have delegated powers and tasks, including auditors and experts contracted by them.	
3. Information covered by the professional secrecy, including in the context of exchange of information among competent authorities under this Regulation, and competent authorities designated or established in accordance with Directive (EU) 2022/2555 and Directive (EU) 2022/2557, shall not be disclosed to any other person or authority, except by virtue of provisions laid down by Union or national law.	
4. All information exchanged pursuant to this Regulation between competent authorities which concerns business or operational conditions, and economic or personal affairs, shall be confidential and subject to the	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
requirement of professional secrecy, except where a competent authority states, at the time of initiating the communication, that such information may be disclosed, or where such disclosure is necessary for the purpose of legal proceedings.	[redacted]
Article 116	
Evaluation and review	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
1. By 1 December 2035, and every five years thereafter, the Commission shall submit to the European Parliament and the Council a report on the evaluation of this Regulation, including an assessment of the environmental, economic and social impacts of space activities on other sectors, and shall submit, as appropriate, a report on its review, accompanied, where necessary, by a legislative proposal. The reports shall be made public.	
2. For the purposes of the evaluation and review referred to in paragraph 1, the Commission may request the Agency and the Member States to	

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Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
provide data and information. The Agency and the Member States shall promptly provide the requested data and information to the Commission.	[redacted]
3. In carrying out the evaluation and review referred to in paragraph 1, the Commission shall take into account the opinions, positions and findings of the Agency, the European Parliament, the Council, the Member States and the competent authorities, as well as other relevant bodies and organisations or relevant sources.	
Article 117	
Reports to the Commission	
By 1 December 2031 and every year after that date, Member States shall report to the Commission on the status of the implementation of this Regulation. The report shall include information on enforcement actions and updates on the space sector at national level, such as competitiveness aspects	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
with impact on the functioning of the internal market and elements on public and private spending needs.	[redacted]
In their first report Member States shall indicate to the Commission their preparatory actions and measures taken at national level including adaptations to ensure the smooth application of this Regulation.	
Article 118	
Transitional period	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
1. For authorisations regarding assets planned to be launched after 1 January 2030 for which the critical design review phase ended on [JO: calculate 12 months from the date of entry into force of this Regulation] this Regulation shall only apply from 1 January 2032.	[redacted]

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
2. Competent authorities, as regards Union space operators, and the Agency, as regards third country space operators, shall ascertain the end of the critical design review stage referred to in paragraph 1 at the moment when the space operators submit the proof obtained from the relevant entity entrusted by contract with the technical approval of the design of the spacecraft.	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74), VII (art. 113-119)**	**Drafting Suggestions and Comments**
Article 119	[redacted]
Entry into force and application	
This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.	
It shall apply from 1 January 2030.	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
	[redacted]
This Regulation shall be binding in its entirety and directly applicable in all Member States.	
Done at Brussels,	
For the European Parliament *For the Council*	
The President *The President*	

PUBLIC

Commission proposal **Title II (art.10+15), IV (chap. I: art. 58-74),** **VII (art. 113-119)**	**Drafting Suggestions and Comments**
[…] […]	

PUBLIC

Space Act – ANNEXES I-VI, IX, X
From: EL, FR, IE, IT, LU, NL, PL, SE

Deadline: ***Friday 14 November 2025 cob***
Updated: 19/11/2025 13:07

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Guidelines to be followed

Please kindly provide your contributions in the table below.

Drafting suggestions: you may use '**track changes**'* or formatting (for example **bold-underline** for additions and ~~strike-through~~ for deletions, **where necessary, in a different colour**). *Track changes can only be connected once the cursor is placed in editable areas (Drafting or Comments columns).

To make it feasible to consolidate all contributions, the structure of the table must not be changed, so **no rows can be added or deleted.**

New provisions may only be added in any of the **'existing cells'.**

Name of document: please add the **two initials** of your delegation's country followed by a space (to the MS Word document name), followed by any optional text, for example, for Austria: **AT comments on … .docx**

Thank you for your cooperation!

Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
General Comments	[redacted]

Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
	[redacted]

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Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
Space Act - Annexes	[redacted]
Annex I	
SAFETY AT LAUNCH REFERRED TO IN ARTICLES 58, 59 and 60	[redacted]

PUBLIC

Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
1. Safety at launch and re-entry	
1.1. Coordination requirements	
Union launch operators shall implement the following coordination requirements:	
(a) Before launch or re-entry, a Union launch operator shall enter into an agreement with:	[redacted]

Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
(i) the European Network Manager and affected Air Navigation Service Providers (ANSPs), in order to agree on the appropriate measures to minimise the impact of the closing of the air routes on air services and set-out the procedures for the issuance of the Notice to Airmen (NOTAM), and the procedures for closing the air routes during the respectAne launch or re-entry windows and;	[redacted]

PUBLIC

Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
	[redacted]
(ii) the maritime authorities, to set-out the procedures for the issuance of the Notice to Mariners.	
	[redacted]

PUBLIC

Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
	[redacted]

PUBLIC

Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
	[redacted]
(b) The requirement laid down in point (a) shall not apply where the Union launch site operator has already coordinated with the ANSPs and the maritime authorities the aspects referred to in point (a)(i) and (ii).	
(c) The Union launch operators shall provide timely information to the Network Manager and the Air Navigation Service Providers in order assess the size of the airspace to be closed and the routes affected such as to safely and efficiently integrate the space launches into the European Air Traffic System.	

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Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
	[redacted]

PUBLIC

Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
	[redacted]
1.2. Launch collision avoidance (LCOLA)	
1.2.1. The LCOLA shall be carried out before launch.	
1.2.2. The LCOLA shall be carried out with the support of the relevant entity referred to in Article 64(1).	

PUBLIC

Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
The Union launch operator shall ensure that the entity referred to in Article 64(1) obtains the predicated ephemerides for the launcher.	[redacted]
1.2.3. The method for calculating the LCOLA shall be developed by the Commission in accordance with Article 59(3), point (a), considering the probability of the launcher to collide with an object of interest, which shall depend on the following:	

PUBLIC

Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
	[redacted]
(a) whether the spacecraft is habitable;	

PUBLIC

Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
	[redacted]
(a) the size of the object;	
(b) whether the spacecraft is active.	

PUBLIC

Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
1.2.4. The Union launch operator shall assess and mitigate the risks related to collision in line with point 1.3, of Annex II.	[redacted]
1.2.5. The Union launch operator shall define the launch closure window according to the LCOLA assessment.	
1.3. Casualty risk	

PUBLIC

Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
The casualty risk at launch and at re-entry shall be limited by the application of the following measures:	[redacted]
(a) The calculation of the collective risk for casualties due to launch and re-entry shall be performed by using an approved method to be selected among existing methods by the Commission, in accordance with Article 59(3), point (b), or a new method to be developed by the Commission in accordance with Article 59(3), point (b), with due consideration for the following elements:	

PUBLIC

Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
	[redacted]
(i) all the phenomena leading to a risk of catastrophic damage (ascent phase, fallout from stage after separation, re-entry into the atmosphere of a deck put into orbit, recovery phase of a reusable deck);	
(ii) pre-fragmentation trajectories (atmospheric or in outer space), depending on the flight times and faults considered;	
(iii) the corresponding fragmentation and debris generation scenarios, at the re-entry or at the moment of neutralisation of the launch vehicle and the return to Earth of any element of the launcher;	
(iv) the dispersion on the ground of the debris and the evaluation of the effects thereof;	

PUBLIC

Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
(v) the reliability of the launch vehicle for the launch phase, including, where applicable, during the recovery phase;	[redacted]
(vi) the reliability of the deorbiting manoeuvre of the launcher element put into orbit, in the case of controlled re-entry.	
(b)The casualty risk shall be limited to a threshold which shall be specified in the implementing act referred to in Article 59(3), point (b) by duly taking into account the differences in the types of risks entailed by the following risk scenarios:	
(i) risk at launch;	
(ii) risk at re-entry (controlled and un-controlled);	
(iii) risk for the recovery phase of reusable launcher elements.	
The implementing act referred to in Article 59(3), point (c), shall set out specific quantitative allocations for a particular risk of catastrophic damage, in particular for the specific cases of sea and air routes.	

PUBLIC

Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
2. Flight safety system	
2.1. Risk assessment	
2.1.1. In their risk assessments, Union space operators shall identify potential failure scenarios that could make the launch vehicle hazardous.	
2.1.2. The failure scenarios referred to in point 1 shall include scenarios for deviation from the flight corridor, dangerous fall-back phases, non-nominal flight control behaviour, and failure to achieve orbit.	
2.1.3. In the risk assessments, Union launch operators shall set out specific rules for controlled or un-controlled re-entry. In the case of controlled re-	

PUBLIC

Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
entry, Union launch operators shall identify failure scenarios related to the propulsion object placed in orbit becoming a hazard, in particular in the case of failure to control the level or direction of thrust.	[redacted]
2.2. Neutralisation	

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Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
2.2.1. The on-board neutralisation system shall meet at least the following requirements:	
(a) The system can be activated remotely or automatically through an on-board algorithm.	
(b) For automatic systems, Union launch operators shall submit the detailed data and validation test results to the competent authority.	

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	[redacted]
2.2.2. Specific rules for controlled re-entry shall be in place.	
On-board automatic systems shall be in place, and criteria to ensure controlled re-entry shall be defined, in line with point 2.1.3	
3. Launcher safety plan	
The launcher safety plan shall include at least the following elements:	
(a) the confirmation of coordination and agreement between the Union launch operator and the ANSP and maritime authorities in line with point 1.1, point (a), unless an agreement has already been entered between the	

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Union launch site operator and the relevant authorities, in line with point 1.1, point (b), demonstrated by a written confirmation;	[redacted]
(b) the result of the LCOLA, in line with point 1.2;	
(c) the result of the calculation of the collective casualty risk at launch and re-entry, in line with point 1.3;	
(d) the risk assessment of the failure scenario of the flight safety system, in line with point 2.2.	
Annex II	

Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
SPACE DEBRIS MITIGATION FOR LAUNCHERS REFERRED TO IN ARTICLE 61	[redacted]
1. Limitation of debris	
1.1. Limit the projected generation of debris	
1.1.1. Launch vehicles shall be designed to limit the generation of debris during nominal operations in accordance with the following requirements:	
(a) For single-spacecraft launches, the total number of launch vehicle orbital stages and resulting debris objects shall not exceed one.	

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	[redacted]

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	[redacted]
(b) For multi-spacecraft launches, the total number shall not exceed two.	

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	[redacted]
(c) Launch vehicles deployed in GEO protected orbit shall remain outside the GEO protected regions for at least 100 years.	
(d) Launch vehicles deployed in MEO shall at the end of its mission, in accordance with the measures and the indicated safe region specified in the implementing act referred to in Article 61(3), point (b).	
(e) The orbital lifetime of a launch vehicle deployed in LEO, shall be the one specified in the implementing act referred to in Article 61(3), point (a).	
(f) The limitation of the risk of components becoming detached from the launcher and being placed in orbit which shall be carried out through the measures laid down in the implementing act in accordance with Article 61(3), point (a).	

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Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
1.1.2. The requirements referred to in point 1.1.1., (a) and (b), shall not apply to the pyrotechnic system and to the solid or hybrid propellants.	
1.2. Avoiding fragmentation in orbit due to internal causes	
1.2.1. The probability of accidental fragmentation due to internal causes shall be limited in the manner specified in the implementing act referred to in Article 61(3), point (c).	
1.2.2. The launch vehicle shall be designed and operated in a way so that at the end of the space mission, passivation of all components is carried out in the following manner:	
(a) All energy reserves on board shall be permanently depleted or shall be in such a state that their depletion is unavoidable, within a reasonable period of time, or that they do not present a risk of generating debris.	

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(b) All means of generating energy on board shall be permanently deactivated, or all equipment directly supplied by energy production means shall be placed in a state such that such equipment entails no risk of generating debris.	
(c) Following the end of life, the launcher shall be in a stable condition with minimal internal energy.	
1.3. Avoiding fragmentation due to collision	
In accordance with the requirements in terms of duration and threshold established in the implementing act referred to in Article 61(3), point (d), mitigating measures shall be implemented to limit the likelihood of collision between:	
(a) launcher elements and launched objects;	

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Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
(b) launcher elements and existing space objects in orbit (crewed, un-crewed and debris).	
2. End of life disposal	
2.1. Design coordination between the Union launch operator and spacecraft mission designer	[redacted]
The Union launch operator shall collaborate with the mission designer of the spacecraft to be launched in the context of the respective space mission with a view to design the launch phase of the space mission in a way that facilitates the disposal of the launch vehicle upper stage and considers the specification of the final injection orbit.	[redacted]

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	[redacted]
2.2. Disposal of launch vehicle in LEO	
The disposal of launchers in LEO shall be performed by one of the following means, chosen in the following order of preference based on technical feasibility:	
(a) A launcher in LEO shall be de-orbited by controlled atmospheric re-entry.	
The design shall allow for the demise ('design for demise') or deliberate destruction of the launch vehicle orbital stage in accordance with the	

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Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
conditions established in implementing act referred to inArticle 61(3), point (e).	
If a controlled re-entry is not possible, and the casualty risk for an uncontrolled re-entry is low, the launch vehicle may instead be placed in a decay orbit, for a limited period, in line with point 1.1.1, point (e). In that case:	[redacted]
(i) the casualty risk shall be computed, by using a standardised method with a limited risk on ground, in accordance with the provisions of point 1.3, point (a), of Annex I;	[redacted]

Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
	[redacted]
(ii) the design shall allow for the demise ('design for demise') or the deliberate destruction of the launch vehicle orbital stage in line with conditions to be specified in the implementing act referred to in Article 61(3), point (e).	
2.3. Disposal of launchers in MEO	
The disposal of launch vehicles in MEO shall be performed in an orbit that does not interfere with protected regions and valuable orbits for a limited amount of time, in line with point 1.1.1, point (d).	
2.4. Disposal of launch vehicles in GEO	

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Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
The disposal of launch vehicle in GEO shall be performed by placing the launcher in a graveyard orbit, ensuring that it remains outside GEO protected region for a period of at least 100 years, under the effect of natural disturbances.	
2.5. Probability of successful disposal	
2.5.1. The launch stage of a space mission, and the launch vehicle orbital stage, respectively, shall be designed in such a way to have a high probability of successful completion of the disposal actions.	
2.5.2. The probability of successful completion of the disposal actions shall be calculated considering at least the following elements: all relevant systems, subsystems and equipment, including their potential redundancy levels, reliability, and performance degradation over time, as well as the availability of the necessary energy and resources.	

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2.5.3. The calculation of the probability of successful disposal actions, and the percentage threshold, shall be done in accordance with the method set out in the implementing act referred to in Article 61(3), point (f).	
2.5.4. Union launch operators shall carry out an identification of the systems and capabilities required for successful disposal actions, including:	
(a) estimations and uncertainties related to the successful disposal;	
(b) the amount of propellant required to support disposal or re-orbit manoeuvre;	
(c) the power requirements for disposal or re-orbit manoeuvre;	
(d) the control requirements for disposal or re-orbit manoeuvre;	

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(e) the communication requirements for disposal or re-orbit manoeuvre.	
2.6. Failure response plan	
2.6.1. In the event of a failure preventing the launch vehicle orbital stage from executing the disposal actions, alternative disposal orbits shall be chosen to minimise the orbital lifetime or risk of interference with protected regions before loss of critical systems.	

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2.6.2. This shall be specified in a failure response planning before launch.	[redacted]
3. Space debris mitigation plans	
3.1. Debris control plan	
The debris control plan shall include at least the following elements:	

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(a) Evidence of compliance to the restrictions on planned debris generation, in line with point 1.1.1, point (a) or point 1.1.1, point (b), as applicable, and point 1.1.1, point (c), as well as with point 1.1.2, including relevant results from testing and analysis.	
(b) Evidence of compliance with the orbital lifetime, in line with point 1.1.1, points (d), (e) and (f).	
(c) Evidence of compliance with the requirement on probability of accidental fragmentation, in line with point 1.2.1, and measures to mitigate the risk such as choice of materials.	
(d) Evidence of compliance with the passivation measures, in line with point 1.2.2, including relevant results from testing and analysis, and to the probability of successful passivation.	
3.2. End-of-life mission disposal plan	

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The end-of-mission disposal plan shall include at least the following:	
(a) The description of the planned disposal method, in line with point 2.2, point 2.3 or point 2.4, as applicable, for both nominal and non-nominal scenarios.	
(b) The confirmation regarding the collaboration between the Union launch operator and the spacecraft mission designer, in line with point 2.1, including the specification of the final injection orbit.	
(c) Evidence of compliance with the description on the adherence to the threshold of probability of successful disposal, including the relevant verification and analysis, in line with point 2.5.1, point 2.5.2 and point 2.5.3.	
(d) The identification of systems and capabilities, in line with point 2.5.4.	

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Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
(e) A failure response plan, in line with point 2.6.	
Annex III	
TRACKING AND SOFTWARE REFERRED TO IN ARTICLE 63	
1. Tracking	
A spacecraft shall be trackable, according to the following principles:	
1.1. Union spacecraft operators shall either have themselves the technical means, or shall rely on external sources, to transmit the position of the spacecraft to the entity providing the Collision Avoidance service referred to in Article 64(1).	
1.2. The capability to transmit the position referred to in point 1.1. shall meet the requirements laid down in points 1.3. and 1.4.	[redacted]

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	[redacted]
1.3. The tracking of the location in orbit shall be as precise as possible. The level of precision may take into account the existence of variations according to the region concerned and the size of the object.	[redacted]

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1.4. The tracking system shall be based on either passive or active tracking.	[redacted]
1.5. As soon as possible after injection, Union spacecraft operators shall share with the relevant entity providing the Collision Avoidance service referred to in Article 64(1) the necessary up-to-date information to monitor the risks of collision with the catalogued space objects that the respective space spacecraft object may encounter.	
1.6. The information referred to in point 1.5. shall include, at least, the following elements:	

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Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
(a) ephemeris, from the Union spacecraft operator's own orbit restitution means, or from the space monitoring systems;	[redacted]
(b) a strategy for action, in line with Article 103;	
(c) covariances.	
2. Ground-based segment software requirements	[redacted]

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Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
	[redacted]
2.1. The ground segment shall be capable of providing a daily orbital forecast, including manoeuvres, for the spacecraft, for up to:	[redacted]

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Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
(a) 7 days at minute level intervals, and in accordance with the Consultative Committee for Space Data Systems (CCSDS) format in LEO;	
(b) 14 days at minute level intervals and in accordance with CCSDS format in MEO;	
(c) 14 days at minute level intervals and in accordance with CCSDS format in GEO.	
2.2. The ground segment shall provide rank 7 covariance formation (position, velocity, drag) for 7 day trajectory forecasts.	[redacted]

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Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
2.3. The ground-based segment shall be able to process CCSDS data format, and in particular Orbital ephemerides Messages (OEM) and Conjunction Data Messages (CDM), for the collision avoidance operations.	
Annex IV	
COLLISION AVOIDANCE REFERRED TO IN ARTICLES 15 AND 64	
1. Requirements for the choice of the collision avoidance (CA) space service provider referred to in Article 15(1), first subparagraph, point (a)(i).	
Third country space operators shall ensure that the CA space service provider they subscribe to, pursuant to Article 15(1), first subparagraph, point (a)(i), complies with the following requirements:	
1.1. General requirements	

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Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
(a) The technical means to assess collision – a CA system – and compliance with the requirements of Section 1 of this Annex.	
The CA system shall be either external or in-house, provided that in the case of an in-house system, adequate mechanisms are in place to ensure the independence of the respective CA space service provider.	
(b) The CA space services provider shall provide to its users a decision with sufficient time to enable manoeuvres on quality conjunction assessment results on an operational timeframe.	
(c) The CA space services provider shall ensure CA space service provision for all phases of the mission (from launch to disposal).	
1.2. Requirements for the input ingestion	

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Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
(a) The CA space services provider shall be able to ingest orbits in standard format and associated covariance, including planned manoeuvres.	
(b) The CA space services provider shall be able to ingest data from various sources, such as ephemerides provided directly by spacecraft operators, orbits from catalogue of space objects and Conjunction Data Messages (CDMs) provided by external data source.	
(c) The CA space services provider shall be able to compute covariance information in exceptional cases when not included in the data source.	
1.3. Requirements regarding data Quality Check	
(a) The CA space services provider shall perform data quality checks to assess the data from space operators.	

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(b) The CA space services provider shall perform calibration of sensors' data.	
1.4. Requirements for the CA process	
(a) The CA space services provider may use existing catalogues and CDMs in the operational CA service.	
(b) The CA space services provider shall support the screening of ephemerides, the time histories of both operational and predicted positional and velocities that incorporate all planned manoeuvres.	
(c) The CA space services provider shall perform the following tasks for spacecraft operation, by making use of available sources of internal and external information:	
(i) identifying conjunctions within the screening volume adapted to the orbit regime of the protected spacecraft;	

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(ii) assessing the risk of the conjunctions, based on the probability of collision and, when appropriate, on geometry (miss distance and radial distance) criteria;	
(iii) generating CDMs;	
(iv) providing users with a diverse, user-selectable set of conjunction and CA "Go/No-Go" manoeuvre metrics, to assess the collision risk and to develop an appropriate course of action;	
(v) checking that mitigation actions decrease the risk level of the conjunctions to be mitigated, and do not unduly increase the risk level of other conjunctions.	
(d) The CA space services provider shall use collision probability estimation techniques whose soundness is generally accepted, such as those used by the Union CA space services provider referred to in Article 64(1), and appropriate for a given encounter.	

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(e) The CA space services provider shall be able to coordinate with other CA service providers, especially in case of High Interest Event.	
1.5. Timeliness requirements	
(a) The CA space services provider shall periodically assess the risk of conjunction.	
The recommended time interval shall be once per day, per GEO spacecraft, and once per hour, per LEO/MEO spacecraft (provided that new information is available).	
(b) The CA space services provider shall have one person available to provide support within 1 hour, on a 24h/7 days basis.	
2. Requirements for Union spacecraft operators	

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2.1. In the case of manoeuvrable spacecraft, Union spacecraft operators shall be able to perform CA manoeuvres.	
2.2. In the case of non-manoeuvrable spacecraft, Union spacecraft operators shall cooperate with the Union CA space services provider referred to in Article 64(1) under best efforts.	[redacted]
2.3. Union spacecraft operators shall provide to the Union CA space services provider referred to in Article 64(1) information about its operational orbit(s), in the form of predicted positional and velocities time histories that incorporate all planned manoeuvres, including realistic covariances:	[redacted]

Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
(a) 1 day before performing planned manoeuvres for non-automatic [redacted]	[redacted]
(b) as soon as possible for automatic CA systems.	[redacted]
2.4. The Union spacecraft operator shall notify the Union CA space services provider referred to in Article 64(1) about:	[redacted]

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	[redacted]
(a) any change as regards the active and manoeuvrability status of its spacecraft;	
(b) any change regarding the end of the space mission;	
(c) any exceptional operations;	[redacted]
(d) any change as regards the re-entry method (controlled / semi-controlled /uncontrolled);	

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(e) any action planned after a High Interest Event alert.	
2.5. The Union spacecraft operator in charge of a manoeuvrable spacecraft shall provide a contact point available to respond:	[redacted]
(a) within 8 hours on a 24h/7 days basis for LEO;	[redacted]
(b) within 24 hours, on a 24h/7 days basis for MEO and GEO.	[redacted]

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2.6. The Union spacecraft operator shall provide the Union CA space services provider referred to in Article 64(1) with the radius of the sphere englobing its spacecraft, or an upper-bound estimation.	
2.7. Union spacecraft operators and the Union CA space services provider referred to in Article 64(1) shall define at the time of spacecraft service registration:	
(a) as regards the elements related to the safety distance requirement, the limit above which the risk of collision is considered high enough to trigger a High Interest Event alert;	

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	[redacted]
(b) specific requirements according to the different phases of the mission (launch, transit, passivation, EOL-operations).	
Annex V	
SPACECRAFT SPACE DEBRIS MITIGATION REFERRED TO IN ARTICLE 70	

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Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
	[redacted]
1. Limit spacecraft fragmentation	
1.1. Limitation of projected generation of debris	
To limit the planned generation of debris during nominal operations, the following requirements shall be implemented:	
(a) A spacecraft shall be designed to limit the generation of debris, in accordance with the requirements set out in the implementing act referred to in Article 70(3), point (a).	

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	[redacted]
(b) Each planned debris estimated to be in orbit for the period of time specified in the implementing act referred to in Article 70(3), point (a), shall be justified in the Debris Control Plan.	
(c) Union spacecraft operators shall put in place measures for the design of pyrotechnic devices and solid rocket motors in line with the requirements laid down in the implementing act referred to in Article 70(3), point (a).	
1.2. Avoiding fragmentation due to internal spacecraft causes	

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Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
1.2.1. To limit the risk of accidental fragmentation caused by on-board source of energy, the following requirements shall be implemented:	
(a) The probability of accidental fragmentation of a spacecraft in Earth orbit shall be limited, in accordance with the requirements laid down in the implementing act referred to in Article 70(3), point (b)(i), until its end of life.	
The calculation of the risk of accidental fragmentation of a spacecraft shall follow a standardised method, taking into account all known failure modes.	

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	[redacted]
(b) The spacecraft on-board sources of energy shall be designed to be robust and take into account the following factors:	
(i) the expected nominal environmental extremes;	
(ii) the nominal mechanical and chemical breakdown;	

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(iii) the potential impact of system spacecraft failure modes; and	
(iv) the impact of on-board sources of energy on the spacecraft's ability to passivate.	
(c) The spacecraft shall be designed taking into consideration the specificities of its subsystems, such as the electrical and propulsion systems, or the pressurized systems' risk of fragmentation during their orbit lifetime.	

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	[redacted]
(d) The in-orbit operation of spacecraft shall include procedures for the monitoring of the relevant parameters of each subsystem identified as a potential source of space debris generation, in order to detect malfunctions.	
(e) Spacecraft shall be passivated in accordance with the following principles:	
(i) Measures taken to implement the requirement regarding passivation shall take into account specificities related to the type of propulsion.	
(ii) When electric passivation is used, the design of spacecraft shall ensure that schematics of electrical passivation are established and specified.	

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(iii) Union spacecraft operators shall, before the end of life of the spacecraft, update the passivation procedures to check if the passivation capabilities of the spacecraft are still nominal.	[redacted]
(iv) Except for Cubesats, the design of spacecraft shall ensure it contains a redundancy function for passivation.	

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Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
	[redacted]
(v)Union spacecraft operators shall deplete energy reserve in either of the following ways:	
(1)through hard passivation, whereby a Union spacecraft operator shall put in place controls with parameters set to a level which cannot cause an explosion or deflagration large enough to release orbital debris or fragmentation of the spacecraft;	
(2)through soft passivation in accordance with the conditions set out in the implementing act referred to in Article 70(3), point (b).	

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(vi) Union spacecraft operators shall deactivate the parts of the spacecraft that produce energy.	
(vii) Following the passivation there shall be no more radioelectric emissions of the platform and the payload.	
(viii) Passivation shall not generate space debris larger to 1 mm, with the exception of the ventilation of propellant.	
(f) In the case of electrical passivation, energy sources shall be isolated and the battery drained.	

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	[redacted]
Specific rules regarding passivation for re-entry shall be specified in the implementing act referred to in Article 70(3), point (d).	
1.3. Avoiding fragmentation due to collision	
To limit the fragmentation caused by collision, the following requirements shall be implemented:	

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(a) Spacecraft shall be designed and manufactured, and space missions shall be respectively designed, in a way that limits the risk of collision, in accordance with the requirements laid down in the implementing act referred to in Article 70(3), point (b).	
(b) Spacecraft shall be designed and manufactured to limit the risk that a space debris or meteoroids causes the spacecraft or its component(s) to fragment, and, where tethers are used, additional measures shall be implemented to mitigate the risk of collision with space objects and meteoroids, in accordance with the requirements laid down in the implementing act referred to in Article 70(3), point (b).	
(c) The probability of collision with a space object and meteoroids shall be calculated before launch for the entire lifetime of the spacecraft, and the risks shall be limited, in accordance with the threshold laid down in the implementing referred to in Article 70(3), point (b).	

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(d)The calculation of the probability of collision shall follow the standardised method laid down in the implementing act referred to in Article 70(3), point (b).	
2. Reliability design and control	
2.1. Provisions concerning the reliability of the design	
2.1.1. The design and manufacture of spacecraft and of its components and sub-systems shall be:	
(a) verified, through testing, analysis, demonstration or inspection;	
(b) validated, through acceptance testing, demonstration or inspection; and	

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(c) tested, analysed and demonstrated, where such testing, analysis and demonstration may vary based on the type of equipment and the criticality of the functions.	
2.1.2. Control of the design, manufacture, integration and implementation of spacecraft systems shall be put in place, in order to manage hazards, especially those arising from critical activities.	
2.2. Operational procedures for quality and reliability control	
Union spacecraft operators shall implement a quality management system.	
2.2.1. Union spacecraft operators shall implement a quality management system.	
The implementation of a quality management system shall cover at least quality assurance, RAMS (reliability, availability, maintainability, safety),	

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including health monitoring, failure prognostics and configuration management.	
2.2.2. The monitoring and controlling of any deviation in the manufacturing and implementation of the space mission shall include the following:	
(a) implementation of a system to monitor and control deviations in manufacturing and implementation, including amongst other things the following:	
(i) deviations in relation to configuration (definition, launch system, production and implementation process);	
(ii) deviation resulting from the utilisation of in-flight data;	

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(iii) the operational sequences involving the spacecraft control shall be tested before launch, for the critical phases of a space mission (including but not limited to launch and early operation phase, decommissioning, critical operations in orbit);	
(iv) pressure and temperature in the engines, tanks, pressure vessels;	
(v) parameters (temperature and voltage) of batteries to detect failures;	
(vi) parameters to detect failure modes of the orbit and attitude control system.	
(b) ensuring the traceability of technical and organisation events affecting the engineering and manufacturing processes.	

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2.2.3. Definition of procedures to assess critical functions, using in-flight data.	
(a) The procedures shall foresee a re-evaluation to be carried out at least the following times:	
(i) upon request of the component authority, during nominal lifetime and during time of mission extension;	
(ii) upon detection of an anomaly which could affect the successful deorbiting;	
(iii) when evaluating a space mission lifetime extension;	

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Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
(iv) upon occurrence of a major change on the space environment (for example a catastrophic fragmentation) with a significant impact on the operational orbit or disposal approach;	
(b) At least the following parameters shall be re-assessed in the procedures referred to in point (a):	

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(i) the monitored and updated probability of successful disposal with flight data, to ensure that the probability of successful disposal is high;	
(ii) the foreseen probability of successful disposal as referenced in Section III, Part A, for the remaining time in orbit;	
(iii) the foreseen number of collision avoidance manoeuvres up to the end of life, with updated environmental models (and respective Delta V);	
(iv) the disposal orbit and the respective risk of collisions from the foreseen deorbit time up to re-entry (and guarantee that the respective Delta V is available).	
3. **End of life**	
3.1. Probability of successful disposal	

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3.1.1. Union spacecraft operators shall calculate and adhere to assigned limits on the probability of successful disposal.	
3.1.2. The probability of successful disposal shall be high and shall be calculated according to the requirements set out in the implementing act referred to in Article 70(3), point (c).	
3.1.3. At the design phase, the calculation by Union spacecraft operators of the probability of successful disposal shall be based on recognised method, based on state of the art, set out in the implementing act referred to in Article 70(3), point (c), and shall include:	
(a) an assessment of the probability that a space debris or meteoroid impact prevents the successful disposal of the spacecraft;	
(b) an assessment of uncertainties in the availability of resources, such as propellant, required for the disposal;	

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	[redacted]
(c) the inherent reliability of equipment necessary to conduct the disposal, and a monitoring of the equipment, including the subsystems, units and functions used solely for disposal;	
(d) probability of collisions on appendages, unless demonstrated that they do not affect the disposal functions;	
(e) passivation operations, even after loss of command or loss of contact.	

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	[redacted]
3.1.4. The probability of successful disposal shall be reassessed after launch, taking into consideration any changes in the operational status of the spacecraft.	
3.1.5. If propellant is used:	
(a) The probability, calculated prior to launch, of having the propellant needed for the end-of-life manoeuvres, at each moment during the	

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space mission, and up to the initiation of successful decommissioning manoeuvres, shall be maximal.	
(b) Before disposal, the Union spacecraft operator shall check that it has to the necessary propellant to perform the disposal.	
3.2. Design of the spacecraft in view of end of life disposal	

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3.2.1. Spacecraft shall be designed to support end of life disposal through the means referred to in point 3.3, point 3.6 or point 3.7, as applicable.	
3.2.2. Disposal capabilities shall be planned and checked at the design stage. For LEO space missions, this shall include designing for the type of planned re-entry.	
3.2.3. Disposal capabilities shall be available at any time of the space mission.	
3.2.4. Protection of disposal systems from space debris and meteoroids shall be demonstrated.	

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	[redacted]
3.2.5. Union spacecraft operators shall be able to maintain communication links and active tracking during disposal phase.	
3.3. Removal of spacecraft in LEO	
The removal of spacecraft in LEO shall be performed by one or more of the following means, chosen in the following order of preference based on technical feasibility:	
(a) Performing a controlled re-entry with a well-defined impact footprint on the surface of the Earth, to limit the casualty risk;	
(b) Performing a semi-controlled re-entry after the end of mission, in case the design complies with the casualty risk;	

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	[redacted]
(c) Performing an immediate uncontrolled re-entry after the end of mission, in case the design complies with the casualty risk;	
(d) Allowing its orbit to decay naturally, in accordance with the limit of cumulative accidental collision probability, maximum orbital lifetime, and the limit for casualty risk;	

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(e) In exceptional justified cases, for Very High LEO, disposal can take place in an orbit not interfering with protected regions and valuable orbits;	
(f) Removal by ISOS.	
3.4. Maximum orbital lifetime before re-entry for LEO	
3.4.1. The Union spacecraft operator of spacecraft in LEO shall disclose the expected time in orbit following:	

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	[redacted]
(a) the end of the space mission;	
(b) the completion of the passivation procedure.	
3.4.2. For LEO, the orbital lifetime, after the end of the mission, and before re-entry into the atmosphere, shall be limited in accordance with the requirements set out in the implementing act referred to in Article 70(3), point (c).	

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	[redacted]
3.5. Rules for re-entry for LEO	
3.5.1. For spacecraft being disposed in accordance with the rules laid down in Part 3.4, Union spacecraft operators shall consider design for demise as one of the steps to minimise the casualty risk.	

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	[redacted]
3.5.2. Union spacecraft operators shall demonstrate that there is no risk of on-orbit collision with crewed stations following three days after the de-orbiting and return to Earth manoeuvres.	
3.5.3. Union spacecraft operators shall carry out an assessment as to whether parts of the spacecraft will survive atmospheric re-entry and impact	

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the surface of the Earth and shall set out the measures to be taken to reduce the casualty risk, in line with point 3.5.4.	[redacted]
3.5.4. The probability of casualties per re-entry shall be further specified in the implementing act referred to in Article 70(3), point (c)(iii), considering the following requirements:	
(a) be as low as possible;	

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	[redacted]
(b) be expressed as a maximum probability of having at least one victim (collective risk);	
(c) include casualties on ground, as well as regards air traffic and maritime traffic;	
(d) in the case of premature or accidental re-entry, Union spacecraft operators shall, as a matter of priority, implement all measures to reduce the risk to the ground.	
3.5.5. The re-entry shall analyse the risk for the environment due to the substances which might survive the re-entry.	

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	[redacted]
3.5.6. In case the spacecraft contains radio-active materials, the conditions set out in the implementing act referred to in Article 70(3), point (c)(iii), shall be followed.	
3.5.7. Spacecraft that cannot perform a controlled re-entry as planned, shall be passivated, provided that passivation can be carried out in a safe, timely and controlled manner.	
3.5.8. For a spacecraft that survives a planned re-entry and is of a size determined in accordance with the implementing act referred to in Article	

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70(3), point (c)(iii), Union spacecraft operators shall register to a re-entry service, able to:	[redacted]
(a) follow the re-entry;	
(b) make predictions on potential landing site.	
3.5.9. The re-entry service referred to in point 3.5.8 shall inform the relevant air traffic and maritime authorities of any expected re-entry.	
3.6. Removal of spacecraft in MEO	

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Removal from Earth orbits outside of the protected orbital regions to an orbit not interfering with protected regions and valuable orbits within a number of years specified in the implementing act referred to in Article 70(3), point (c).	[redacted]
3.7. Removal of spacecraft in GEO	
Removal from Earth orbits outside of the protected orbital regions in an orbit not interfering with protected regions and valuable orbits within 100 years after its end of life.	
3.8. Failure response	

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3.8.1. The Union spacecraft operator shall draw up a failure response plan in line with point 4.3.	
3.8.2. The Union spacecraft operator shall implement the failure response if a critical system for the disposal process fails.	
4. Space debris mitigation plans	
4.1. Debris control plan	
4.1.1. A fragmentation prevention plan shall be developed by considering each item containing stored energy. When developing such plans, Union spacecraft operators shall have due regard to systems that are most likely to cause accidental fragmentation of a spacecraft, such as notably:	
(a) the electrical systems, especially batteries;	

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(b) the propulsion systems and associated components;	
(c) the pressurized systems;	
(d) the rotating mechanisms.	
4.1.2. When drawing-up the fragmentation prevention plan, a system level risk assessment approach shall be used.	
4.1.3. The debris control plan shall list at least the following:	
(a) a description of adherence to the restrictions on the planned debris generation, in line with point 1.1.	
(b) a description of adherence to the requirement on probability of accidental fragmentation, in line with point 1.2.	

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(c) a description of adherence to limiting the risk of fragmentation due to collision, in line with point 1.3.	
(d) a description of the adherence to space reliability of design, in line with point 2.1.	
(e) a description of the operational procedures for quality and reliability control, in line with point 2.2.1 and point 2.2.2.	
4.2. End of life disposal plan	
The end of life disposal plan shall contain at least the following:	
(a) a description of adherence to the threshold of successful disposal laid down in point 3.1.2.	

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(b) for Union spacecraft operators in LEO, a description of the selected disposal method, in line with the options laid down in point 3.3, point 3.4 and point 3.5.	
(c) for Union spacecraft operators in MEO, a description of the adherence to the requirements laid down in point 3.6.	
(d) for Union spacecraft operators in GEO, a description of the adherence to the requirements laid down in point 3.7.	
4.3. Failure response plan	[redacted]

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The Union spacecraft operator shall develop a failure response plan that shall include at least the following elements:	
(a) the criteria for selecting, from the alternative disposal methods, the one showing the lowest level of risk for a spacecraft being left in an operational orbit;	
(b) the criteria for initiating the passivation contingency actions;	
(c) for Union spacecraft operators in MEO and GEO, steps to remove spacecraft to an alternative orbit, and passivate it before any further critical systems are lost;	
(d) steps to ensure the safe re-entry of the spacecraft from LEO, and to passivate it before any further critical systems are lost;	

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(e) the component of existing or future spacecraft that share components that could lead to a similar failure of the critical system (lessons learned);	
(f) a removal plan that assesses the possibility of removal to be carried out by an ISOS service provider, including:	
(i) a dedicated operational mode for the service operation (removal), and making use of the integrated removal interface (if applicable) to de-risk a provided in-space service by the servicer spacecraft;	
(ii) the technical means and the specific mission mode;	
(iii) if the removal plan is not successful, or if it excludes the use of ISOS providers in mitigating risks and leaves the spacecraft in a protected orbit without manoeuvrability, spacecraft operators shall include the dedicated spacecraft service interfaces (SSI) referred to in Article 101(3), in future spacecraft as part of the authorisation requirements.	

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Annex VI	
CONSTELLATIONS REFERRED TO IN ARTICLE 73	
1. Intra-constellation requirements	
1.1. For constellations, mega-constellations and giga-constellations, the debris control plans referred to in Article 70(2), point (a), shall, with a view to address the collision risk during orbital lifetime, include a report on intra constellation collision risks, listing the measures taken for mitigating that risk.	
1.2. For mega-constellations and giga-constellations the following shall apply:	[redacted]

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(a) the spacecraft design and operations shall enable the implementation of automated processes as part of the collision avoidance strategy;	EL (Drafting Suggestions): (a) the spacecraft design and operations shall enable the implementation of automated processes as part of the collision avoidance strategy, either on the ground or onboard; EL (Comments): The addition clarifies that automated collision-avoidance processes may be implemented either onboard the spacecraft or from the ground, reflecting current operational practices. This provides design flexibility while preserving the original requirement that the system supports automated collision-avoidance capabilities. FR (Drafting Suggestions): ~~(a) the spacecraft design and operations shall enable the implementation of automated processes as part of the collision avoidance strategy;~~ FR (Comments): Are we certain of the benefit of having all constellations with autonomous CA systems? This implies that all algorithm are capable of working together, otherwise we may introduce additional safety issues with respect to more

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	[redacted]
(b) Union spacecraft operators shall consider orbits that minimise the intra-constellation collision risk, including in cases of in-orbit failure, Launch and Early Operations (LEOP) and disposal;	
(c) during the disposal phase and after the end-of-life, Union spacecraft operators shall analyse the risk of intra-constellation collisions and keep it at the lowest level possible, to be specified in the implementing act referred to in Article 73(4), point (a).	

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2. Additional reporting requirements	
2.1. For constellations, mega-constellations and giga-constellations, Union spacecraft operators shall take specific measures to ensure limitation of light and radio pollution to be specified in the implementing act referred to in Article 73(4), point (b), first subparagraph;	[redacted]
2.2. For mega-constellations and giga-constellations that following shall apply:	
(a) the debris control plan referred to in Article 70(2), point (a), shall include an analysis that demonstrate that specific care has been taken to avoid collision with the international space stations for any phase of the space mission;	

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(b) a report shall analyse, after one year of operation, the probability of intra and inter-collision risks, and compare it with the one calculated at the time of the granting of the authorisation;	[redacted]
(c) Union spacecraft operators shall, after one year of operation, demonstrate the effectiveness of measures taken to address the light and radio pollution which have been explained in their application for authorisation. If such measures are not effective, Union spacecraft operators shall initiate the development of technical solutions through research to diminish the measured pollution for their next generation spacecraft in the respective constellation;	

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(d) Union spacecraft operators shall in case of transit from the injection orbit to the final orbit:	
(i) prepare a plan for transit and demonstrate that the probability of collision is limited;	
(ii) report on the functioning of vital systems is due before reaching operational orbit.	
Annex IX	
QUALIFIED TECHNICAL BODIES FOR SPACE ACTIVITIES REFRRED TO IN ARTICLE 35	[redacted]

Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
	[redacted]
1. General requirements for qualified technical bodies for space activities	

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1.1. A qualified technical body for space activities shall be established under national law and shall have legal personality unless it is part of a competent authority.	[redacted]
1.2. A qualified technical body for space activities shall be independent from:	
(a) a space services provider referred to in Article 2(1), where that qualified technical body for space activities carries out a technical assessment in relation to a product, process, service, including risk-management, regarding matters covered by this Regulation;	
(b) a competitor of a space services provider referred to in Article 2(1), as regards the carrying out of the technical assessment of a product,	

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process, service, including risk-management, regarding matters covered by this Regulation;	
(c) an undertaking, other than space services providers referred to in point (a), or competitors referred to in point (b), of this paragraph, that has an economic interest in a product, process, service, including risk-management, regarding matters covered by this Regulation.	
1.3. A body belonging to a business association or professional federation that represents undertakings which are involved in the design, development, production, provision, assembly, use, maintenance, testing, or operation of a product which a technical body assesses, or respectively undertakings which are involved in the use or operation of a service, activity or process that such technical body certifies, may only be considered as a qualified technical body for space activities, under this Regulation, if such body meets the requirements of independence and absence of conflict of interest.	

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	[redacted]
1.4. A qualified technical body for space activities shall be organised and managed in a way that safeguards the independence, objectivity and the impartiality in carrying out its activities.	
For that purpose, a qualified technical body for space activities shall ensure that:	
(a) procedures to safeguard and document its impartiality are set up and guaranteed throughout its activities, and that such procedure apply both to the top-level management and to the personnel carrying out technical assessment activities;	
(b) the qualified technical body for space activities and its personnel carries out the technical assessment with the highest degree of professional integrity and with all requisite technical competence in the specific area(s) of activity, free from any pressure and inducements,	

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particularly of a financial nature, which might influence the judgement or the results of the technical assessment activities;	
(c) it has policies and procedures to distinguish between the tasks it carries out in that capacity and any other tasks;	
(d) the qualified technical body for space activities, its top-level management, and its personnel responsible for carrying out technical assessment activities does not engage in any activity that may conflict with the independence of judgement or the requirement of integrity, as regards the technical assessment, notably consultancy services;	
(e) the remuneration of the top-level management and of the personnel of the qualified technical body for space activities carrying out technical assessment tasks shall not depend on the number of technical assessments being carried out, or on the results of those technical assessments;	

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(f) transparency is ensured regarding the procedure for carrying out technical assessments, for instance by means of publication on the relevant website of a description of such procedures.	
A qualified technical body for space activities shall meet the organisational, quality management, resource-related and process-related requirements necessary to fulfil its tasks.	
The organisational structure and operation of a qualified technical body for space activities, as well as the allocation of responsibilities and reporting shall be such as to ensure confidence in the performance of tasks and in the results of its technical assessment activities.	
1.5. At all times, and for each procedure in the technical assessment, a qualified technical body for space activities shall:	[redacted]

Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
	[redacted]
(a) have at its disposal personnel possessing the necessary technical knowledge and appropriate and sufficient experience to perform technical assessment tasks;	[redacted]
(b) use procedures which take into account any relevant criteria applying to:	

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(i) the space services providers referred to in Article 2(1), such as the criteria of size of such space services provider or the specific sector of space activities;	[redacted]
(ii) the objective elements, such as structure, degree of complexity of processes or technology, mass or serial nature of the production processes;	
(c) possess the necessary means to perform all the technical and administrative tasks for technical assessment activities, including having access to all necessary data, equipment or facilities.	
1.6. **The personnel of a qualified technical body for space activities which is in charge of carrying out technical assessment activities shall have:**	[redacted]
(a) appropriate understanding and knowledge of the matters covered by this Regulation, of relevant standards regarding matters covered by this Regulation, or relevant provisions of Union law;	[redacted]

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	[redacted]
(b) sound knowledge of the specific requirements for which a technical assessment activity is carried out;	
(c) sound technical and vocational training covering all technical assessment activities in relation to which a qualified technical body for space activities has been notified;	
(d) the ability to draw up certificates, records and reports demonstrating that technical assessments have been carried out.	
1.7. A qualified technical body for space activities shall be capable of carrying out tasks in relation to matters covered by this Regulation with the highest degree of professional integrity and requisite competence in specific fields, whether such tasks are carried out by the qualified technical body for	

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space activities itself or are being carried out on its behalf and under its responsibility.	
When a qualified technical body for space activities delegates part of its tasks, it shall have sufficient internal competence to effectively evaluate the way in which the external party executes such tasks on its behalf.	
1.8. A qualified technical body for space activities shall ensure the permanent availability of administrative, technical, legal and scientific personnel with knowledge and experience of the relevant technologies of space activities and the technical requirements laid down in Regulation, Title IV.	
1.9. A qualified technical body for space activities shall have in place documented procedures to ensure that its personnel and any relevant committees, subsidiaries, subcontractors or associated body or, as applicable, personnel of external bodies, handle the confidential information to which it comes into possession during the performance of technical assessment, in	

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compliance the professional secrecy requirement laid down in Article 116, except when disclosure is required by law.	
The staff of a qualified technical body for space activities shall observe professional secrecy regarding all information obtained in carrying out the tasks in relation to matters covered by this Regulation.	
1.10. A qualified technical body for space activities shall hold or be in a position to obtain in due time, a valid personnel security clearance certificate.	
1.11. A qualified technical body for space activities shall hold an appropriate liability insurance for carrying out its technical assessment activities.	[redacted]
1.12. A qualified technical body for space activities shall participate in the coordination activities as referred to in Article 39.	

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1.13. A qualified technical body for space activities shall take part, directly or through representation, in the activities of the European standardisation organisations, or shall at least ensure that it is aware and up to date with relevant standards in the areas falling into the matters covered by this Regulation.	
1.14. A qualified technical body for space activities shall operate in accordance with fair and reasonable terms and conditions, in particular taking into account the interests of SMEs in relation to fees.	[redacted]
2. Specific requirements for qualified technical bodies for space activities carrying out tasks of verification and validation of the environmental footprint study	[redacted]

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Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
2.1. Qualified technical bodies for space activities that carry out technical assessment of matters covered by Chapter III of Title IV, shall meet, in addition to the requirements laid down in section I of this Annex, the requirements laid down in Section 8 of the Commission recommendation C(2021)9332.	
Annex X	[redacted]

Commission proposal - ANNEXES I-VI, IX, X	Drafting Suggestions and Comments
INFRINGEMENTS TO THE REGULATION REFERRED TO IN ARTICLE 54	[redacted]

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	[redacted]
1. Infringements applicable to Union space operators	

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1.1. A Union space operator infringes Article 6(1) in conjunction with Article 7(1) by providing space services before having obtained authorisation to carry out space activities.	
1.2. A Union space operator intending to have recourse to the space services provided by a third country space operator or an international organisation infringes Article 6(5), by not demonstrating to its competent authority, in its application for authorisation, the registration in URSO of that third country space operator or international organisation or, where the procedure of registration in URSO has not been completed yet, the Union space operator does not coordinate closely with the third country space operator or international organisation, the relevant competent authority and the Agency, including by requiring updates on the status of the registration process.	
1.3. A Union space operator infringes Article 6(6), by not informing without delay the competent authority of the need for the provision of space services by a third country space operator or international organisation which arises after an authorisation has been issued, such as in the case of ISOS, and	

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by not providing to the competent authority the proof of registration in URSO of that third country space operator or international organisation.	
1.4. A Union space operator infringes Article 7(2), by not submitting in the application for authorisation a technical file with all necessary documentation and supporting evidence to demonstrate compliance with the requirements laid down in Title IV, Chapters I to V, as applicable to its specific space mission.	[redacted]
1.5. A Union space operator infringes Article 7(3), by not indicating in its application for authorisation, to the competent authority which qualified technical bodies for space activities the applicant intends to use for the technical assessment of the requirements laid down in Title IV, Chapters I to V, as applicable.	

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1.6. A Union space operator infringes Article 9(1), by not ensuring that they comply with the conditions laid down in Article 9(1), points (a) and (b), when submitting the declaration referred to in Article 9(1), second subparagraph, or by failing to submit that declaration.	
1.7. A Union space operator infringes Article 9(5), by not provided the explanations required by the competent authorities, where random inspections identify aspects that conflict with the declaration made by the Union space operator and the explanations are needed to allow the competent authority to conclude on the extent of, or absence of risks entailed by such conflict.	
1.8. A Union space operator that is subject to the light regimes referred to in Article 10(2), (3) and (4), fails to comply with the conditions referred to in those paragraphs.	
1.9. An applicant to become a Union space operator of Union-owned assets infringes Article 11(2), by failing to provide to the Agency and the Commission all the technical details and explanations that demonstrate compliance with the requirements laid down in Title IV, Chapters I, II, III, IV	

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and V and in Article 12(1), first subparagraph, or infringes Article 11(3), second subparagraph, by not providing all additional information or by bringing clarifications.	
1.10. A Union space operator of Union-owned assets infringes Article 11(2) and Article 12(1), first subparagraph, by failing to fulfil the requirements laid down in Article 12(1), first subparagraph and in Title IV.	
1.11. A Union space operator of Union-owned assets infringes Article 13(1), by not reporting any unforeseen event that may require the modification of its authorisation or any planned or imminent termination of its activity.	
1.12. A Union space operator of Union-owned assets is found in any of the situations referred to in Article 13(2), first subparagraph.	
1.13. A Union space operator infringes Article 26(1) and (2), by failing to accompany the contracts for the provision of space-based data and space services in the Union by the e-certificate.	

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1.14. A Union space operator of Union-owned assets infringes Article 49, by failing to submit to a decision of request for information laid down in Article 49(3) or to provide the information referred to in Article 49(1).	
1.15. A Union space operator of Union-owned assets infringes Article 50(5), first subparagraph by not submitting to an investigation and by hindering the exercise of the powers referred to in Article 50(4).	
1.16. A Union space operator infringes Article 51(5), by failing to submit to the on-site inspections ordered by decision of the Agency and the Commission.	
1.17. A Union space operator infringes Article 53(2), in conjunction with Articles 49, 50 and 51, by failing to submit to that investigation.	
1.18. A Union launch operator infringes Article 58, Article 59, Article 60, or Article 61 as regards the safety of launchers.	

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1.19. A Union spacecraft operator infringes any of the rules laid down in Article 62 to Article 73 as regards the safety of spacecraft and space activities.	
1.20. A Union space operator infringes Article 74, by not taking all the measures to ensure the conformity of contracted space objects or, as applicable, the conformity of components, with the design and the manufacturing requirements as laid down in Chapter I of Title IV.	
1.21. A Union space operator infringes resilience requirements, by failing to comply with the risk management rules laid down in Article 76, Article 77, Article 78, Article 79, Article 80, Article 81, Article 82, Article 83, Article 84, Article 85, Article 86, Article 87, Article 88, Article 89, Article 90, Article 91, Article 92 and Article 95(1), (2) and (3).	
1.22. A Union space operator of Union-owned assets infringes Article 93 regarding the reporting of significant incidents of Union-owned assets, by	

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failing to report to the structure referred to in Article 93(1) or by not reporting in the manner specified in Article 93(7), first subparagraph.	
1.23. A Union space operator operating the assets referred to in Article 5, first paragraph, point (21), infringes Article 93, by failing to report to the competent authorities, as laid down in Article 93(2), or by failing to report in the manner specified in Article 93(7), first subparagraph.	
1.24. A Union space operator qualifying as an essential or important entity pursuant to Annexes I or II of Directive (EU) 2022/2555, infringes Article 93(3), first subparagraph, by not reporting as referred to in that Article or infringes Article 93(7), first subparagraph, by not reporting in the manner specified therein.	
1.25. A Union space operator identified as a critical entity pursuant to the Annex to Directive (EU) 2022/2557 infringes Article 93(3), second subparagraph, by not reporting in the manner determined by the Member State, pursuant to that article, or infringes Article 93(7), first subparagraph, by not reporting in the manner specified therein.	

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1.26. An applicant for authorisation as a Union space operator infringes Article 96(4) and (6), by failing to submit an Environmental Footprint Declaration ('EFD') to its competent authority or by failing to submit all the elements referred to in Article 96(6).	
1.27. A Union space operator infringes Article 97, by failing to include in the calculation the space missions referred to in Article 97(1), or the activities referred to in Article 97(2).	
1.28. A Union space operator of Union owned-assets infringes Article 97(3), by failing to include the components referred to in Article 3(1), points (a) to (c) and point (e), of Regulation (EU) 2021/696 and in Article 1 of Regulation (EU) 2023/588, as applicable.	
1.29. An applicant for authorisation as Union space operator infringes Article 98(1), by failing to possess the EF certificate when applying for authorisation.	

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1.30. An applicant for authorisation as Union space operator infringes Article 99, by failing to transmit the datasets referred to in Article 99(1), first subparagraph.	
1.31. A Union space operator infringes Article 101.	
1.32. A Union space operator infringes Article 112(1), first subparagraph, by failing to accompany the application for a Union Space Label by a detailed technical file demonstrating the fulfilment of the requirements established in the Union Labelling Scheme(s) for which the Union Space Label is sought.	

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1.33. A Union space operator that is holder of a Union Space Label infringes Article 112(3), by failing to continue to comply with the requirements established in the Union Labelling Scheme(s) for which that Union Space Label was awarded, or infringes Article 112(6), by failing to inform the Agency of any subsequently detected irregularities concerning the labelled space mission, service or product, that may have an impact on its compliance with the requirements of the respective Union Space Label.	
2. Infringements applicable to third country space services providers	
2.1. A third country space operator infringe Article 14(1), by providing space services to Union space operators and in relation to Union-owned assets and to assets referred to in Article 5, first paragraph, point (21), without being registered in the Union Register of Space Objects and without being in the possession of the e-certificate.	

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2.2. A third country space operator infringes Article 15(1), by failing to fulfil any of the requirements listed in Article 15, in conjunction to Chapters I to V of Title IV, as specified in Article 15.	
2.3. A third country space operator infringes Article 17(3), by failing to provide in the application to the Agency all the evidence needed to demonstrate compliance.	
2.4. A third country space operator infringes Article 22, by failing to provide during the dialogue with the Agency the required explanations, documentation and evidence in support of its explanations, including any technical analysis, and to achieve compliance.	
2.5. A third country space operator infringes Article 23, by failing to designate in writing one or more legal persons in one of the Member States to act as their legal representative in the Union, or by failing to mandating that legal representative to have the powers to be addressed in addition to, or instead of, the third country space operator, by the competent authorities, the Commission and the Agency, on all issues related to compliance with this	

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Regulation, and to have all necessary powers and resources to guarantee an efficient and timely cooperation with such authorities.	
2.6. A third country space operator infringes Article 25(3), by failing to accompany the contracts for the provision of space-based data and space services in the Union by the e-certificate.	
2.7. A third country space operator infringes Article 25(4), by failing to send the Agency the details referred to in Article 25(4), first subparagraph, to allow the Agency to generate the e-certificate.	
2.8. A third country space operator infringes Article 26(1) and (2), by failing to accompany the contracts for the provision of space-based data and space services in the Union by the e-certificate.	
2.9. A third country space operator infringes Article 49, by failing to submit to a decision of request for information laid down in Article 49(3) or to provide the information referred to in Article 49(1).	

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2.10. A third country space operator infringes Article 50(5), first subparagraph, by not submitting to an investigation or by hindering the exercise of the powers referred to in Article 50(4).	
2.11. A third country space operator infringes Article 51(5), by failing to submit to the on-site inspections ordered by decision of the Agency and the Commission.	
2.12. A third country space operator that met the requirement referred to in Article 52(1), point (b), infringes Article 52, by not submitting to the inspection or by hindering the exercise of the powers laid down in Article 52(2).	
2.13. A third country space operator infringes Article 53(2), in conjunction with Articles 49, 50 and 51.	
3. Infringements applicable to international organisations	

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3.1. International organisations with specific technical expertise in matters covered by this Regulation, chosen by Member States to carry our technical assessments pursuant to Article 8(1), point (b), infringe Article 8(3), first subparagraph, by not complying with the requirements laid down in Regulation, Title III, Chapter I, Section 3, pursuant to Article 8(3), first subparagraph.	
3.2. An international organisation infringes Article 25(3), by failing to accompany the contracts for the provision of space-based data and space services in the Union by the e-certificate.	
3.3. An international organisations infringe Article 14(2).	[redacted]

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3.4. An international organisation infringes Article 25(4), by failing to send the Agency the details referred to in Article 25(4), first subparagraph, to allow the Agency to generate the e-certificate.	
3.5. An international organisation infringes Article 26(1) and (2), by failing to accompany the contracts for the provision of space-based data and space services in the Union by the e-certificate.	
3.6. An international organisation infringes Article 49, by failing to submit to a decision of request for information laid down in Article 49(3) or to provide the information referred to in Article 49(1).	
3.7. An international organisation infringes Article 50(5), first subparagraph, by not submitting to an investigation or by hindering the exercise of the powers referred to in Article 50(4).	
3.8. An international organisation infringes Article 51(5).	[redacted]

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	[redacted]
3.9. An international organisation infringes Article 53(2), in conjunction with Articles 49, 50 and 51.	
3.10. An international organisation infringes Article 58, Article 59, Article 60, or Article 61 as regards the safety of launchers.	
3.11. An international organisation infringes Article 62, Article 63, Article 64, Article 65, Article 66, Article 67, Article 68, Article 69, Article 70, Article 71, Article 72 or Article 73, as regards the safety of spacecraft and space activities.	
3.12. An international organisation infringes Article 74, by not taking all the measures to ensure the conformity of contracted space objects or, as applicable, the conformity of components, with the design and the manufacturing requirements as laid down in Chapter I of Title IV.	

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3.13. An international organisation infringes the risk management requirements, by failing to comply with the rules laid down in Article 76, Article 77, Article 78, Article 79, Article 80, Article 81, Article 82, Article 83, Article 84, Article 85, Article 86, Article 87, Article 88, Article 89, Article 90, Article 91, Article 92, and the conditions laid down in Article 95(1), (2) and (3).	
3.14. An international organisation operating Union-owned assets infringes Article 93 regarding the reporting of significant incidents of Union-owned assets, by failing to report to the structure referred to in Article 93(1) or by not reporting in the manner specified in Article 93(7), first subparagraph.	
3.15. An international organisation operating the assets referred to in Article 5, first paragraph, point (21), or its own assets, infringes Article 93, by failing to report to the competent authorities, as laid down in Article 93(2), or by failing to report in the manner specified in Article 93(7), first subparagraph.	

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3.16. An international organisation infringes Article 97, by failing to include in the calculation the space missions referred to in Article 97(1), or the activities referred to in Article 97(2).	
3.17. An international organisation operating the Union owned-assets infringes Article 97(3), by failing to include the components referred to in Article 3(1), points (a) to (c) and point (e), of Regulation (EU) 2021/696 and in Article 1 of Regulation (EU) 2023/588, as applicable.	
3.18. An international organisation infringes Article 98(1), by failing to possess the EF certificate in order to provide space services as regards the assets referred to in Article 5, first paragraph, points (20) and (21).	
3.19. An international organisation infringes Article 99, by failing to transmit to the Commission the datasets referred to in Article 99(1), first subparagraph.	
3.20. An international organisation infringes Article 101.	[redacted]

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	[redacted]
4. Infringements applicable to primary providers of space-based data	
4.1. A primary provider of space-based data infringes Article 27(2), by failing to alert their suppliers and to contact the Agency or the competent authority of the Member State where they are established of any received alerts or complaints about potential irregularities.	
5. Infringements applicable to collision avoidance space services providers	
5.1. A collision avoidance space service provider infringes Article 102(1), by failing to provide to the competent authority of the Union space operator up-to-date information about the spacecraft, or infringes Article 102(2), first subparagraph, by failing to report on the aspects laid down therein.	

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5.2. A collision avoidance space service provider infringes Article 103(1), first subparagraph, by failing to ensure the conditions referred to in Article 103(1), first subparagraph for the CAM, or infringes Article 103(2), by failing to ensure the coordination according to that paragraph, or infringes Article 103(3), first subparagraph, by failing to base the strategy of action on the principles laid down in that first subparagraph, or infringes Article 103(4), by failing to establish contact with the respective spacecraft, or in case of successful contact infringes Article 103(5), first subparagraph, by failing to observe the requirements laid down in that first subparagraph, or infringes Article 103(6), by failing to recommend a strategy in accordance with the requirements laid down in that paragraph.	
6. Infringements applicable to qualified bodies for space activities	
6.1. Without prejudice to the regime of other entities that can provide technical assessments pursuant to Article 8(1), first subparagraph, an entity infringes Article 34(1), by carrying out such technical assessments without being designated and notified as a qualified technical body for space activities under this Regulation.	

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6.2. An entity which intends to carry out technical assessments for one or more matters covered by Title IV, Chapters I to V, infringes Article 34, by failing to provide or update the required documentation or to meet the conditions set in paragraphs 4 to 8 of that Article.	
6.3. An entity that intends to carry out technical assessment for one or more matters covered by Title IV, Chapters I to V, infringes Article 35, by failing to meet any of the conditions laid down in Article 35(1), (2), (3) and (4), as applicable, in conjunction with the provisions of Annex IX.	
6.4 A qualified body for space activities infringes Article 35, by no longer meeting any of the requirements laid down therein, in conjunction with the provisions of point 1, of Annex IX or point 2, of Annex IX.	