STUDY NO. 6 · SOVEREIGNTY AND ASSET DATA

Who keeps the register of the sky?

Asset management goes into orbit, and its information belongs to others

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In six years, satellites have acquired maintenance, a life-extension market and a law of end of life: the last unmanageable class of assets has become manageable, and the international asset management standard, ISO 55001, becomes applicable to it at the very moment when its 2024 revision makes decision-making and data central requirements. This study maps that shift, then confronts it with its first condition: deciding the fate of an asset presupposes knowing where it is and what threatens it. Yet the operational register of the sky is kept by an American military squadron, its civilian successor very nearly failed to be born, and the powers that buy orbital assets, from the Gulf to Europe, contract for their access to someone else's information. Sovereignty over space assets is decided less by the ownership of satellites than by the keeping of the register.

The question left open · The asset that becomes manageable · Two doctrines in orbit · What the framework would require · The register of the sky, as it exists · Dependence by contract · What this means · What we do not know, and what matters · Glossary · References

The question left open

A text that leaves a question open must come back for it. The article published at the opening of this issue [32] recounted an unprecedented scene: on 9 April 2025, a space tug detached itself from the satellite it had kept alive five years beyond its programmed death, then set off to serve a second client, while a robot with articulated arms took the road to geostationary orbit with three propulsion modules to be grafted on [1][3][4]. The article drew a finding from it: the end of life of a satellite had ceased to be a fate and become a decision. And it stopped on a question: a decision presupposes knowing where things are, yet, in orbit, that knowledge does not belong to you.

This study takes up the question at the exact point where the article posed it, and treats it as an asset manager would, because that is now the right trade from which to ask it. As long as the satellite was the asset without a workshop, designed, operated, discarded, the discipline born of terrestrial infrastructure had little to say to it; the life-cycle management of a satellite came down to a propellant budget. That time is ending. And at the moment when the discipline becomes applicable up there, its oldest requirement, keeping the register of what one owns, meets a situation it has never known: a domain where the register belongs to none of the asset owners.

The hurried reader can retain the short answer to the question in the title. The register of the sky is kept, operationally, by the 18th Space Defense Squadron of the United States military; it is being partially transferred to an American civilian service that very nearly did not exist and access to which could become chargeable; it is duplicated by a declaratory United Nations legal register that is

unusable for operations; and it is the subject, from London to Abu Dhabi, of subscriptions and agreements that draw a map of dependencies that no one presents as such. The rest of the study establishes each of these points, then draws out what they mean for anyone who owns, operates, regulates or insures an asset in orbit.

The asset that becomes manageable

Three forces, converging and datable, are bringing satellites into the field of asset management.

Maintenance arrives. The demonstration has been made, and it is commercial. Between February 2020 and April 2025, Northrop Grumman's Mission Extension Vehicle 1 extended the life of Intelsat 901 by five years, before the first undocking between two commercial spacecraft in geosynchronous orbit [1][2]; it then served the Australian satellite Optus D3, from which it undocked in August 2026 [3][9]. Its twin, MEV-2, has been docked to Intelsat 10-02 since 2021. The operator's own tally: three satellites served, more than ten years of life restored in total [4]. The next generation left the ground on 21 July 2026: a robotic vehicle with two arms, developed with DARPA and the United States Naval Research Laboratory, carrying three propulsion modules to be grafted onto satellites that were never designed to be touched, and the first unit of a docking and refuelling interface approved as a standard by the Space Force [4][5][6]. Four demonstrations of refuelling in geostationary orbit are on the United States government calendar for 2026 [7]. "These are not demonstrations," says Ryan Tintner, a vice-president of Northrop Grumman [4]; the line is a communicator's, but the contracts, the launches and the interface standards say the same thing.

The law arrives. The American communications regulator requires, for the authorisations it grants, the deorbiting of low-orbit satellites within five years of the end of the mission, a rule adopted in 2022 and in effect since September 2024, replacing the twenty-five-year tolerance that previously prevailed [10]. The international debris mitigation standard, ISO 24113, was revised in 2023 while keeping, for low Earth orbit, the twenty-five-year criterion, and European space standardisation (ECSS) adopted it with modifications in February 2024 [11][12]. On 25 June 2025, the European Commission proposed a regulation, known as the EU Space Act, which would make safety, resilience and control of end of life conditions of access to the European market; the text, some one hundred and twenty articles, is under negotiation in the Parliament and the Council and is not in force as I write [13]. The phase of the life cycle that asset management calls disposal thus acquires, jurisdiction by jurisdiction, a legal owner.

The market arrives. Extending, refuelling, deorbiting and inspecting are becoming priced services, available for purchase, in competition with replacement. The end-of-life calculation for a geostationary satellite, non-existent yesterday, becomes a trade-off between the cost of a propulsion module, the value of the remaining revenue and the price of a new satellite, that is to say, quite exactly, what the discipline calls a life-cycle decision. The frontier of the market is itself instructive: no American operator has, to date, captured a defunct satellite in orbit, something only China has done, in 2022, with Shijian-21, and the United States Department of Defense is paying for the demonstration before it exists at home [8]. Even what is impossible today is already being bought.

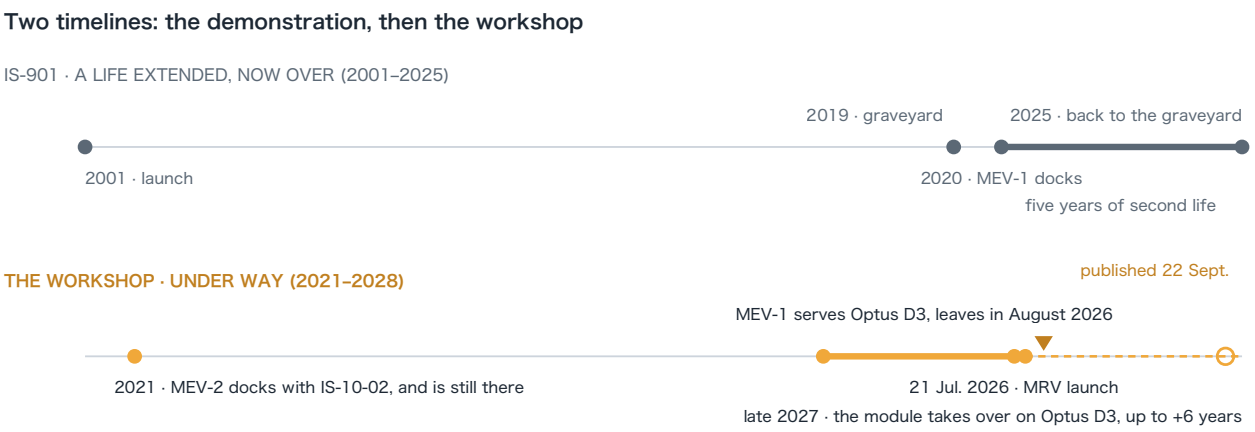


FIGURE 1 The first extended life is over; the workshop is on its way. Top timeline: the completed demonstration. Bottom timeline: the state of the world on the day of publication. Sources: references [1] to [9].

Two doctrines in orbit

This shift does not produce one asset policy but two, opposed point by point, and their coexistence is one of the findings of this study.

In geostationary orbit, the satellite is a **heritage asset**. Single, costly, designed for fifteen years and now extendable beyond that, it justifies maintenance asset by asset: a dedicated tug, a grafted module, soon a refill of propellant. This is the logic of the monument, the one applied to a dam or a bridge: few units, long life, each intervention decided case by case.

In low Earth orbit, the large constellations have made the satellite a **consumable**. Designed for five to seven years and mass-produced, it is not repaired but replaced; reliability is no longer a property of the unit but a population statistic, and maintenance takes the form of a stream of replenishment launches. This is the logic of the vehicle fleet, pushed to thousands of units, with deorbiting as the only end-of-life operation, required within five years by the American regulator.

	Geostationary orbit: the heritage asset	Low Earth orbit: the consumable
Units	a few per operator	hundreds to thousands
Design life	fifteen years or more	five to seven years
Maintenance	asset by asset: tug, module, refuelling	none: replacement by a stream of launches
Reliability	a property of the unit	a population statistic
End of life	graveyard orbit, now negotiable	deorbiting, required within five years by the FCC
Terrestrial analogy	the dam, the bridge	the vehicle fleet

FIGURE 2 **Two asset doctrines coexist in orbit.** The asset management framework does not arbitrate between them: it requires the choice to be made knowingly, from the expected value, and properly equipped (ISO 55001:2024, clause 4.5).

The asset management framework does not arbitrate between these two doctrines, and that is precisely its strength: it requires the organisation to choose knowingly, starting from the value it expects from its assets, and to equip the decision. The 2024 revision of ISO 55001 introduced an entire clause, 4.5, devoted to the decision-making framework [14]. What the standard does not tolerate, on the other hand, is ignorance of the state of one's own fleet. And this is where orbit poses a problem that no other asset domain poses.

What the framework would require

Let us reread ISO 55001, in its 2024 edition, with a satellite operator in mind. I confine myself to the clauses that rub against orbital reality; the rest of the framework, leadership, planning, competence, audit, applies there without any particularity.

Clause 4.5, decision-making. The organisation must establish a decision-making framework, define its criteria, and choose its methods taking into account, among other things, the need to have confidence in the information [14]. This is the requirement that, applied to orbit, changes in nature: confidence in information there is confidence in a third party, and that third party is neither a chosen provider nor a contracted supplier but, as we shall see, a foreign military.

Clause 7.6, data and information. The organisation must determine the data required to support asset management, and specify its attributes, its quality and its source [14]. For a terrestrial asset, the source is a sensor, an inspection round, a meter reading: it can be bought, installed, audited. For an orbital asset, the primary data, where is my asset, what is approaching it, comes from a network of telescopes and radars that the operator does not own, and yet the standard requires it to specify and control that data as its own. ISO 55013, published in July 2024, takes the logic one step further by treating data itself as an asset to be managed [15]; applied here, it would make the orbital catalogue a critical asset of the operator, held by someone else.

Clause 7.7, knowledge. The organisation must ensure that knowledge is readily accessible when decisions are made [14]. A conjunction alert that arrives, or does not arrive, from a free and revocable

courtesy service is, quite exactly, knowledge needed for a decision whose accessibility does not depend on the organisation.

Clause 8.1, the life cycle. Operational control includes life-cycle management, and the standard specifies, in a note, that the disposal of an asset includes the ending of responsibility [14]. Regulated deorbiting within five years is the orbital translation, to the letter, of this ending of responsibility: as long as the object is up there, responsibility runs. Another note to the same clause considers the case where the organisation's period of responsibility is shorter than the life cycle of the asset: this is exactly the situation of the tug and its client, and that of constellation operators whose debris may outlive the company.

Clause 8.3, external providers. Processes provided by third parties must be controlled, their information shared, their performance monitored [14]. The new orbital maintenance market fits into this framework without resistance: a tug is a maintenance provider, a refuelling interface standard is a reversibility clause. The difficulty does not lie there. It lies in the provider that clause 8.3 does not anticipate: the one you do not choose, with whom you do not contract, and which nevertheless supplies the data without which nothing else works.

This framework: who applies it up there? I looked for a satellite operator claiming an asset management system conforming to ISO 55001, a certification, or even a body of literature applying the 55000 series to the orbital segment. I found none; the documented applications of the series stop at the ground segment, at antenna networks and at the agencies' terrestrial infrastructure. An absence is hard to prove, and I therefore state it with caution: after searches conducted in September 2026, nothing indicates that a single operator of orbital assets has taken up the framework at the very moment when its subject, at last, is catching up with it. The field is empty, and the gap is wide open.

The register of the sky, as it exists

Every asset management system begins with a register. The sky has one, but it resembles no other: it is fourfold, and none of its four layers belongs to those whose assets it inventories.

The legal register. The United Nations Convention on Registration of Objects Launched into Outer Space, of 1975, obliges States to declare their space objects [16]. Compliance with it is high, a recent study puts it at about 94% for this binding instrument, for payloads launched between 2015 and 2023 [17], and academic work sets out to predict registration failures [18]. But it is a register of declaration, not of operation: it arrives months or years late, without usable ephemerides, without the condition of the asset, and it says nothing about what is approaching what. No asset manager would keep an inventory this way; it is a cadastre, not a monitoring system.

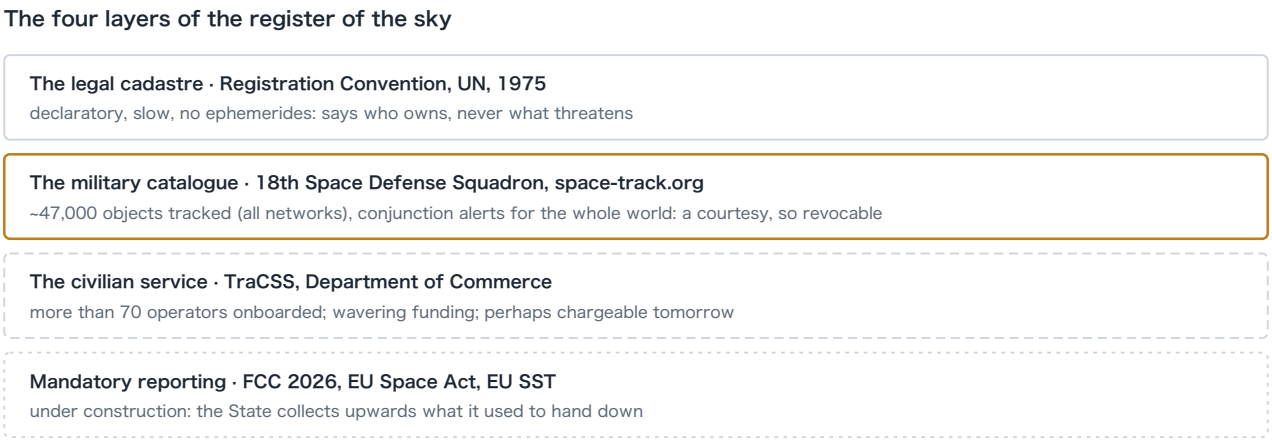


FIGURE 3 **None of the four layers belongs to the owners of the assets it inventories.** The solid amber outline marks the only complete operational layer to date. Sources: references [16] to [26], [30].

The military register. Monitoring, for its part, does exist: it is the catalogue kept by the 18th Space Defense Squadron of the United States Space Force, distributed through the space-track.org platform, whose public part lists some 35,000 objects in orbit; across all surveillance networks, about 47,000 objects are regularly tracked, according to the European Space Agency [19]. It is this catalogue that feeds the conjunction alerts on which avoidance manoeuvres throughout the world depend. It is provided free of charge, as a courtesy, under a sharing programme, and that is precisely the problem: a courtesy service is neither a right, nor a contract, nor a service level. The operator that bases its clause 7.6 on it bases its asset management on the foreign policy of a third State.

The civilian register, in the making. The United States itself judged the situation unhealthy and undertook to transfer the service provided to commercial operators to a civilian authority: the Traffic Coordination System for Space, TraCSS, run by the Office of Space Commerce of the Department of Commerce [20]. The recent history of this system is a warning in itself: its funding was proposed for elimination, the specialist press could run the headline "The Civilian Space Traffic System America Almost Didn't Build" in spring 2026, and its completion remains dependent on the year's budget appropriations: the federal budget proposal for 2026 eliminated its funding, which the appropriations finally voted maintained, and work continues under uncertainty [21][22]. The request for 2027 reopens the chapter: it brings the office down to 11 million dollars, against 52.5 million voted for 2026, with no explicit line for TraCSS, and the system remains in its pilot phase for lack of budget visibility [21][34]. The system is nonetheless very real: more than seventy satellite operators had been onboarded by summer 2026 [34]. In the same movement, the American debate has opened on the end of free access: industrial and political voices argue for charging for space safety services [23]. And the analysts who follow the deployment of the system put it soberly: its role is that of infrastructure, whose value will depend on its reliability, its coverage and its adoption [24]; the office provides it free of charge, but "as is", without warranty, and its data remain, during the pilot phase, intended for "evaluation purposes only" [22][34]. The United Kingdom subscribed to it in June 2026, through a read-only government account [25]; subscribe is the right word, and it is worth pondering: a NATO space power accesses the register of the sky the way one subscribes to a database.

The mirror register. The last layer, and the most recent: the American communications regulator adopted, on 22 July 2026, a reform requiring the satellite operators it authorises to share their space

situational awareness data [26]. The register ceases to be only top-down; the State also collects upwards. Europe, for its part, pools the surveillance capabilities of fifteen Member States in its EU SST arrangement, real but partial, Europe remaining largely dependent on American space data [30]. As for the proposed European regulation, it would make the provision of traffic data an obligation for operators active on the Union market [13].

Four layers, then: a slow cadastre, a free military catalogue, a fragile civilian service that may soon be chargeable, and reporting obligations under construction. Nowhere in this stack does an operator find what ISO 55001 asks it to have: asset information whose source, quality and accessibility at the moment of decision it controls.

Dependence by contract

This dependence is not an abstraction: it is signed. On 11 April 2016, United States Strategic Command announced the signing, with the United Arab Emirates, of an agreement to share space services and data, on the same model as those already concluded with ten States and more than fifty commercial operators, a network that in 2018 counted some twenty States and nearly eighty operators [27][29][31]. The armed forces of Qatar signed theirs in October 2023 [28]. These agreements are generally presented as security cooperation; read by an asset manager, they are something else: the contracting, by States that own orbital assets, of their access to a third party's register.

The Gulf is where this reading stands out most sharply, because it concentrates, at the same moment, the purchase of assets and the absence of a register. The Emirates have equipped themselves with the most complete national space regime in the region, law, agency, licences; Saudi Arabia has created its agency and is investing; the historical operators, Arabsat first among them, operate entire geostationary fleets. This movement, which is real, meets the finding that the article *Bahreïn, région perdue* (Bahrain, the lost region), published with this issue, and issue no. 1 of this collection made about the cloud: the region accumulates digital and orbital assets faster than it acquires the registers that govern them [33]. For the cloud, the missing register was that of data and dependencies; for orbit, it is that of positions and threats. The structure is the same: ownership is localised, operational knowledge remains elsewhere.

Morocco belongs on this map, and I come back to it with a question rather than an assertion, because public information is lacking. The Kingdom owns two observation satellites, Mohammed VI-A and VI-B, launched in 2017 and 2018 [28]. Who keeps the register of their orbital environment, on which conjunction alerts do their manoeuvres depend, and through which channel, a State agreement, a manufacturer's service, a commercial subscription, does that knowledge arrive? I found no public answer, and that is precisely the question this study invites every sovereign owner of orbital assets to ask itself, because the answer is the exact measure of its autonomy in managing them.

What this means

Let us gather the threads. A class of assets is becoming manageable; the framework that organises asset management, revised in 2024, requires a decision-making framework founded on confidence in information, data whose source is specified, and knowledge accessible at the moment of decision; and

the primary data of this class of assets is held by a foreign military squadron, in the process of being duplicated by a fragile civilian service, in a landscape where access to the register is signed for, subscribed to, and tomorrow perhaps invoiced. The conclusion fits in three statements.

For the operator, the register of the sky is an external provider in all but name. The practical consequence is immediate: treat space situational information as clause 8.3 treats a critical provider, that is to say, enter it in the register of dependencies, assess its reversibility, secure a second source, commercial or pooled, and document what operations would become if the courtesy service ceased to be one. No orbital asset management plan that this study looked for, and did not find, seems to contain this line.

For the owner State, orbital sovereignty is measured by the register, not by the fleet. Buying a satellite takes one contract; keeping, or jointly keeping, knowledge of its environment is a long, expensive capability, with no inauguration. The map of sharing agreements and subscriptions to the American civilian system is, to date, the real map of space dependence, and it matches the map of announced space programmes very poorly.

For Europe, finally, the moment is singular: it is negotiating a regulation that will impose on operators obligations to control end of life and to provide data, at the very moment when the register on which all of this will rely remains, for the most part, outside Europe. Imposing information duties without keeping the register is regulating through someone else's eyes.

It will be objected that the register of the sky has always been military and that nothing has broken. That is true, and it is the argument that should worry us: the past availability of a courtesy service is not a commitment, and the budget history of TraCSS has just shown that a single appropriation line is enough to shake what the whole world treats as a given. In asset management, this is called an untreated risk on critical data. In the collection that hosts this study, it is called its thesis: control is not lost by losing ownership, it is lost by ceasing to keep the register. In orbit, no one has ever kept it themselves; it is the only domain where control is missing not because it was ceded, but because it was never held.

What we do not know, and what matters

The limits of this study are real, and I set them out.

The compliance rate for the Registration Convention cited in section 5 comes from a single study, whose methodology I know only through its publication; I give it as an order of magnitude, not as an established measurement. The count of catalogued objects varies by source and changes every week. The precise content of the space data-sharing agreements, that of the Emirates as well as the others, is not public: I establish their existence and their date from the official announcements, not their scope. The progress of TraCSS and its economic model are shifting; what I write about them is dated September 2026 and will age quickly. The absence of applications of ISO 55001 to the orbital segment is an absence of public trace, not proof of non-existence: an operator can apply the framework without claiming to. The operating arrangements of the Moroccan satellites are unknown to me beyond the public elements cited, and I refrain from writing more about them. Finally, this study deals neither with the insurance of orbital assets nor with the military aspects of space surveillance in

their own right; the first subject would extend the article *Bahreïn, région perdue* [33], the second goes beyond the scope of the collection.

What is established, on the other hand, comes down to three facts, each resting on a primary, official or specialist press source. Orbital maintenance has been commercial and operational since 2020, and its second generation has been in flight since July 2026 [1][3][4]. The ISO 55001 framework, in its 2024 edition, makes confidence in information and control of the source of data explicit requirements of asset management [14]. And the operational register of the sky belongs to none of the asset owners it inventories, since it is kept by the United States military, duplicated by a civilian service whose funding wavered from 2025 to 2027, and accessible to third parties through agreements and subscriptions [19][20][21][25][27].

Glossary

Geostationary orbit (GEO). An orbit at an altitude of about 36,000 km where a satellite appears motionless above a point on the equator. Single assets, long service life.

Low Earth orbit (LEO). Orbits at altitudes of a few hundred kilometres, the domain of the large constellations. Assets produced in series, short service life, deorbiting required.

Graveyard orbit. A disposal orbit, a few hundred kilometres above GEO, to which geostationary satellites at end of life are moved to free the arc.

Conjunction. A close approach between two objects in orbit. The "conjunction alert" is the message that warns an operator of a collision risk and triggers, where appropriate, an avoidance manoeuvre.

SSA / space situational awareness. The set of means, telescopes, radars, processing, that make it possible to know what is in orbit, where, and what is approaching what. The "catalogue" is its product.

18th Space Defense Squadron / space-track.org. The United States Space Force unit that keeps the public reference catalogue, and the platform through which it is distributed.

TraCSS. Traffic Coordination System for Space: the American civilian service, run by the Department of Commerce, intended to take over the provision of conjunction alerts to commercial operators.

EU SST. The European space surveillance and tracking arrangement, which pools the capabilities of fifteen Member States.

MEV / MRV / MEP. Northrop Grumman's orbital maintenance vehicles: the life-extension tug (MEV), the robotic vehicle with arms (MRV), the graftable propulsion module (MEP).

References

[1] Northrop Grumman, "Northrop Grumman Achieves First-Ever Undocking Between Two Commercial Spacecraft in Geosynchronous Orbit", press release, 9 April 2025. https://news.northropgrumman.com/satellites/Northrop-Grumman-Achieves-First-Ever-Undocking-Between-Two-Commercial-Spacecraft-in-Geosynchronous-Orbit

[2] Intelsat, "Intelsat Completes Satellite Life-Extension Mission, Makes Space History", press release, 9 April 2025. https://www.businesswire.com/news/home/20250409381182/en/

[3] Northrop Grumman, "Northrop Grumman Continues In-Space Industry Leadership with Second Mission Extension Vehicle Undocking", press release, 13 August 2026. https://news.northropgrumman.com/civil-space/northrop-grumman-continues-in-space-industry-leadership-second-mission-extension-vehicle-undocking

[4] Northrop Grumman, "Northrop Grumman's Mission Robotic Vehicle Launches, Ushering in a New Era of In-Space Servicing", press release, 22 July 2026. https://news.northropgrumman.com/launch/northrop-grummans-mission-robotic-vehicle-launches-ushering-in-a-new-era-of-in-space-servicing

[5] DARPA, "Robotic Servicing of Geosynchronous Satellites lifts off", 21 July 2026. https://www.darpa.mil/news/2026/robotic-servicing-of-geosynchronous-satellites-lifts-off

[6] U.S. Naval Research Laboratory, "Robotic Servicing of Geosynchronous Satellites Launches into Orbit", 21 July 2026. https://www.nrl.navy.mil/Media/News/Article/4551871/

[7] T. Patton, "Fill 'Er Up and Check The Fluids", Exterra, 26 May 2026. https://www.exterrajsc.com/p/fill-er-up-and-check-the-fluids

[8] Satnews, "No U.S. Servicer Has Captured a Dead Satellite. The Pentagon Is Buying It Anyway", 7 September 2026, editor's note of 24 September 2026. https://satnews.com/2026/09/07/nobody-has-captured-an-uncontrolled-satellite-the-pentagon-is-buying-it-anyway/

[9] Optus, "Optus completes first phase of Project Aurora", press release, 12 August 2026. https://www.optus.com.au/about/media-centre/media-releases/2026/08/optus-completes-first-phase-project-aurora

[10] Federal Communications Commission, *Space Innovation; Mitigation of Orbital Debris in the New Space Age*, Second Report and Order, FCC 22-74, adopted on 29 September 2022 (five-year deorbit rule, applicable since September 2024). https://docs.fcc.gov/public/attachments/FCC-22-74A1.pdf

[11] ISO 24113:2023, *Space systems, Space debris mitigation requirements*, fourth edition, May 2023. https://www.iso.org/standard/83494.html

[12] ECSS, ECSS-U-AS-10C Rev.2, *Adoption Notice of ISO 24113*, 9 February 2024. https://technology.esa.int/upload/media/ECSS-U-AS-10C-Rev-2--9February2024-.pdf

[13] European Commission, *Proposal for a Regulation of the European Parliament and of the Council on the safety, resilience and sustainability of space activities in the Union* ("EU Space Act"), COM(2025) 335 final, 25 June 2025; under negotiation. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52025PC0335

[14] ISO 55001:2024, *Asset management, Asset management system, Requirements*, second edition, 2024. Passages rendered by the author from the licensed French edition. https://www.iso.org/standard/83054.html

[15] ISO 55013:2024, *Asset management, Guidance on the management of data assets*, July 2024. https://www.iso.org/standard/82455.html

[16] *Convention on Registration of Objects Launched into Outer Space*, 14 January 1975, United Nations (UNOOSA). https://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/introregistration-convention.html

[17] Space Policies, "A Mandate Without a Lever", compliance analysis of space governance instruments (93.6% for the Registration Convention). https://spacepolicies.org/article/un-pact-future-new-mandate-space/

[18] J. K. Sawmiller, *Using Machine Learning to Predict State Compliance with International Legal Obligations for Registration of Space Objects: Comparative Performance of Logistic Regression and Dense Neural Network Models*, Air Force Institute of Technology, Student Publications, manuscript, autumn 2024. https://scholar.afit.edu/cgi/viewcontent.cgi?article=1051&context=studentpub

[19] Public catalogue of the 18th Space Defense Squadron, distributed via space-track.org. https://www.space-track.org/ Counts: ESA, *Space Environment Statistics*, update of 31 July 2026 (about 47,140 objects regularly tracked by space surveillance networks), https://sdup.esoc.esa.int/discosweb/statistics/ ; CelesTrak, *SATCAT Boxscore* (35,284 objects in orbit as of 7 October 2026), https://celestrak.org/satcat/boxscore.php

[20] Office of Space Commerce (NOAA), "Traffic Coordination System for Space (TraCSS)". https://space.commerce.gov/traffic-coordination-system-for-space-tracss/

[21] FedScoop, "Space commerce official says TraCSS work continues despite budget uncertainty", 17 July 2026. https://fedscoop.com/space-commerce-official-tracss-continues-despite-budget-uncertainty/

[22] KeepTrack, "The Civilian Space Traffic System America Almost Didn't Build", 28 April 2026. https://keeptrack.space/deep-dive/tracss-rollout

[23] Satnews, "Orbital Tolls? Industry Braces for the Commercialization of Space Safety Data", 5 January 2026. https://satnews.com/2026/01/05/no-more-free-rides-the-end-of-u-s-taxpayer-funded-space-safety/

[24] SpaceDebris.ai, "TraCSS in 2026: U.S. Civil Space Traffic Coordination", 14 July 2026. https://spacedebris.ai/tracss-operational-infrastructure-2026/

[25] UK Space Agency, "TraCSS goes global", announcement of British government access to the TraCSS system, 12 June 2026. https://www.linkedin.com/posts/uk-space-agency_tracss-goes-global-international-government-activity-7471221905866485760-uI2m

[26] Federal Communications Commission, Fact Sheet, "Space Modernization for the 21st Century", 1 July 2026 (draft order, adopted at the open meeting of 22 July 2026: obligation to share SSA data). https://docs.fcc.gov/public/attachments/DOC-422740A1.pdf

[27] U.S. Strategic Command, "USSTRATCOM, UAE sign agreement to share space services, data", 11 April 2016. https://www.stratcom.mil/Media/News/News-Article-View/Article/983694/usstratcom-uae-sign-agreement-to-share-space-services-data/

[28] Vizier, "The MENA Space Race", 9 July 2025 (Qatar SSA agreement, October 2023). https://vizier.report/p/mena-space-race

[29] OECD, *The Space Economy in Figures: How Space Contributes to the Global Economy*, 2019 (some twenty State agreements for sharing SSA data with United States Strategic Command). https://www.oecd.org/content/dam/oecd/en/publications/reports/2019/07/the-space-economy-in-figures_518092bf/c5996201-en.pdf

[30] IISS, *Advancing European Military Capacity in Space*, March 2026 (fifteen Member States share their data within EU SST). https://www.iiss.org/globalassets/media-library---content--migration/images-delta/publications/research-papers/2026-new/space-report/advancing-european-military-capacity-in-space.pdf

[31] IDA (Institute for Defense Analyses), B. Lal et al., *Global Trends in Space Situational Awareness (SSA) and Space Traffic Management (STM)*, document D-9074, April 2018. https://www.ida.org/assets/2026/06/18015330/D-9074.pdf

[32] N. Y. Mqam, "À qui appartient la fin de vie d'un satellite ?" [Who owns the end of life of a satellite?], Technopolitique, 22 September 2026, in French. https://technopolitique.eu/articles/fin-de-vie-satellite/

[33] N. Y. Mqam, "Bahreïn, région perdue : la concentration n'avait pas besoin de la loi" [Bahrain, the lost region: concentration did not need the law], Technopolitique, 22 September 2026, in French. https://technopolitique.eu/articles/cloud-bahrein-region-perdue/

[34] Via Satellite (R. Jewett), "TraCSS Traffic Coordination System Remains in Pilot Mode Due to Budget 'Uncertainty'", 26 August 2026. https://www.satellitetoday.com/government-military/2026/08/26/tracss-traffic-coordination-system-remains-in-pilot-mode-due-to-budget-uncertainty/

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