

Navigating the Legal Challenges of the Global Space Economy

Briefing

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I. Introduction

The space economy is growing exponentially. According to the 2026 State of the Satellite Industry Report, worldwide revenues of the global space economy reached USD 429 billion in 2025.¹ In June 2026, SpaceX, the most well-known space start-up, raised USD 85.7 billion in the largest stock market initial public offering ever. As of July 2026, there are 30 unicorn start-ups in the space industry, including the German launch start-up Isar Aerospace,² which, in June 2026, raised another EUR 270 million to fund its global expansion.³ Another European start-up on the list of space unicorns is the Finnish start-up Iceye, which is currently valued at over EUR 10 billion.⁴

Traditional space activities, such as satellite services are growing and expanding, while new business models are emerging and a space infrastructure is developing. Space plays an increasingly important role for a rising number of industry sectors on earth, while at the same time, activities in space itself are also expanding and diversifying.

Driven partly by the role space is taking in defence considerations, public and private funding of space activities is reaching new heights, including in the European Union (EU). In Germany, for example, the Federal Government's Space Security Strategy, approved by the cabinet in November 2025, marks a paradigm shift in German space policy: with planned investments of approximately EUR 35 billion in military space and the so-called new space segment, the government is sending a clear signal to strengthen the space infrastructure as part of Germany's national security architecture.

These developments open up significant market opportunities for companies particularly those in the new space sector but at the same time require a thorough understanding of the applicable legal framework. The rapid technological development is giving rise to a multitude of new situations that require legal classification and must be accommodated within the existing legal framework. Investors and industry operators considering activities in the space economy are well advised to understand the industry dynamics as well as the regulatory framework to be able to measure and mitigate the related risks appropriately.

II. Current space activities

The space economy today still consists mainly of satellites and adjacent services. Of the worldwide revenues of the global space economy in 2025, 71% fell to the satellite industry.⁵ This can be broadly divided into different subsectors: the upstream sector consisting of the manufacturing of space objects, namely satellites and rockets; and of launch services, including spaceports and launch operators. The mid-stream sector consists of satellite operators and ground equipment operators, and the downstream sector consists of the end-users of satellite services, be it of telecommunication services, earth observation services, or navigation, timing and positioning services. Adjacent services, such as in-orbit repairs and refueling, and end-of life services, are also gaining in importance, especially as sustainability and space debris concerns are receiving increased attention.

¹ [State of the Satellite Industry Report](#), accessed on 7 July 2026.

² Jason Rainbow, [The SpaceNews space unicorn tracker](#), 16 June 2026, SpaceNews, accessed on 7 July 2026.

³ Jeff Foust, [Isar Aerospace raises 270 million euros for global launch expansion](#), 9 June 2026, SpaceNews, accessed on 7 July 2026.

⁴ Jeff Foust, [Iceye raises 1 billion euros to expand SAR satellite systems](#), 9 June 2026, SpaceNews, accessed on 7 July 2026.

⁵ [State of the Satellite Industry Report](#), accessed on 7 July 2026.

1. Satellite telecommunication

The satellite telecommunications sector is a high-growth sector, with several satellite constellations being launched, in development, or planned to provide satellite internet first to regions, which lack terrestrial internet coverage, and then possibly more broadly as an alternative service to the terrestrial internet. These include the already operational Starlink and OneWeb constellations, Amazon Leo, Telesat and several Chinese constellations, including Guowang and Qianfan. The push by SpaceX and Amazon into direct-to-device services is likely to accelerate this development.⁶ Satellite-based internet services have also proven particularly valuable from a military perspective, as they are less vulnerable to attacks, and allow for secure communications, including in difficult frontline situations. New communication technologies such as LiFi (light fidelity) and laser communications are promising even greater security.⁷ This explains the also increasing public interest in developing sovereign constellations for military communications. The EU, for example, is planning the IRIS² constellation, which will comprise satellites in different orbits and is designed to provide secure, encrypted broadband communications for EU governments, militaries, and citizens by 2030.⁸ In addition, the Federal Republic of Germany is planning a constellation of over 1,000 satellites, which will serve communication needs in addition to radar functions.⁹

2. Earth observation

Earth observation is another sector, which is growing rapidly, driven by interest from the defence sector, as well as from other industries such as the transport and logistics sector, the agricultural sector, and insurance and energy companies. Earth imaging and radar services are key for military operations as they allow for the observation of enemy ground movements in real time. They are also invaluable for the insurance sector, which uses it to calculate disaster risks; for agricultural businesses, which use earth observation services, for example, to observe crops to be able to react quickly to adapt treatments; or for the logistics and energy sectors, which use earth observation services to track trucks and ships, and survey transmission lines, respectively. As the accessibility of readily

available navigation, timing and positioning services made, for example, the development of rideshare applications possible, so will the growth and improvement of earth observation services spark the development of new business ideas, especially with artificial intelligence now able to analyse large amounts of data in short timeframes. Data gathered through earth observation constellations can already be purchased for a range of uses.¹⁰ Record investments such as the recent funding round by Icyeye illustrate the high interest in this sector, in particular also for military purposes.¹¹

3. Positioning, navigation and timing (PNT) satellite industry subsector

The PNT subsector develops and operates Global Navigation Satellite Systems (GNSS), constellations like the GPS (United States), Galileo (European Union), BeiDou (China) and GLONASS (Russia) constellations to provide precise location and time synchronisation globally. It serves the aviation, maritime, and logistics sectors, for example, and is crucial for military guidance and targeting. Via atomic-clock-based timing, it also enables critical infrastructure such as power grids and financial transactions. Growth in this subsector is driven by the development of autonomous vehicles, the Internet of Things (IoT) and high-precision agriculture.

4. Launch sector

The launch sector is another sector, which is attracting significant public and private investments. Launch capabilities are increasingly considered to form part of states' critical infrastructure, while remaining a bottleneck for space operators.¹² Spaceports require specific conditions, which limit the available options. Even though with the new European developments Andoya in Norway, Esrange in Sweden, and SaxaVord in the United Kingdom, beyond Kourou in French Guiana, capacity is increasing, few launch operators have operating rockets, and even fewer are able to reuse their rockets an advantage for offering reduced launch prices and being able to significantly increase the launch cadence. A recent accident resulting in the destruction of Blue Origin's launchpad, for example, obliged its users to postpone their business objectives, as no alternative launch options were available.¹³

- ⁶ Jeff Foust, [EchoStar sells spectrum to SpaceX, cancels MDA satellite contract](#), 8 September 2025, SpaceNews, accessed on 8 July 2026; Jason Rainbow, [Amazon buys Globalstar to catapult into direct-to-device race](#), 14 April 2026, SpaceNews, accessed on 8 July 2026.
- ⁷ [ESA - Ariane 6 launches Lifi: light-speed secure communications](#), accessed on 8 July 2026.
- ⁸ [IRIS² | Secure Connectivity - Defence Industry and Space; OHB and Rheinmetall establish joint venture](#), accessed on 8 July 2026.
- ⁹ Thomas Jahn and Roman Tyborski, [Bundeswehr plant Weltall-Flotte mit bis zu 1200 Satelliten](#), 7 July 2026, Handelsblatt, accessed on 9 July 2026.
- ¹⁰ [Planet Labs: Satellite Imagery & Earth Data Analytics](#), accessed on 9 July 2026.
- ¹¹ [Canada advances sovereign Earth observation capabilities with \\$2.4M investment in next-generation satellite technology](#), accessed on 9 July 2026.
- ¹² Debra Werner and Emma Ghatti, [Small satellite operators confront a bottleneck to space access](#), 25 June 2026, SpaceNews, accessed on 9 July 2026.
- ¹³ Jason Rainbow, [AST SpaceMobile sees New Glenn setback delaying initial commercial service into 2027](#), 3 June 2026, SpaceNews, accessed on 9 July 2026.

This explains the rising interest in promising European start-ups in the launch sector such as Isar Aerospace, HyImpulse, PLD Space, MaiaSpace, Skyrora and the Rocket Factory Augsburg. What European projects are still striving to achieve has now been accomplished by the Indian company Skyroot Aerospace. It launched satellites into earth's orbit using a privately developed launch vehicle. India is thus the third country, alongside China and the US, to have carried out a private orbital launch.

III. New and emerging activities

In addition to these established services, the space economy is rapidly expanding into new activities. These include the planning of several commercial space stations; the return to the moon; plans for broader space tourism opportunities; the potential construction of orbital data centers; and the exploration of ideas such as space-based solar energy and space mining. Some of these are addressed in more detail below.

1. Commercial space stations

The International Space Station, a joint project by the European Space Agency (ESA), the United States National Aeronautics and Space Administration (NASA), the Russian Roscosmos, the Canadian Space Agency (CSA), and the Japanese Space Agency (JAXA) is nearing the end of its life and will be deorbited in the coming years. Its replacement will be commercial. Several commercial space stations are currently planned, including by Axiom Space,¹⁴ Vast,¹⁵ Starlab,¹⁶ and Blue Origin/Sierra Space.¹⁷ Planned to be launched before the end of this decade, these commercial space stations will offer space for microgravity research, in-space manufacturing and space tourism. For the pharmaceutical industry, for example, the microgravity environment in space offers unique conditions for the development of new medicines.¹⁸

2. Return to the moon

The moon is currently the subject of two competing projects, one led by the United States and one by China. The US-led Artemis missions have as an objective the establishment of a permanent human settlement on the moon. This settlement would serve the purpose of further exploring the moon, but also as the base for economic activities, such as lunar resource exploitation. There is, for example, interest in helium-3 mining, a substance, which, due to its cooling characteristics, would be incredibly valuable on earth, especially in light of the growing need for data centers and the development of quantum computing.¹⁹ A number of private companies are working on preparing the return to the moon, ranging from transport to the moon, lunar landers, a transport system on the moon, a lunar telecommunication system and other infrastructure needs, that are likely to arise.²⁰ The first moon landing of the Artemis missions is planned for early 2028.²¹

3. Orbital data centers

As the increasing use of artificial intelligence is causing an ever-growing demand for data centers, several companies are proposing to build these data centers in orbit, where no cooling would be required, unlimited solar energy is available, and the environmental and social issues, which are slowing these projects on earth, could be avoided. The construction of such data centers would also provide a new market for in-orbit servicing as the maintenance needs of orbital data centers would likely be higher than those of traditional satellites. The construction of orbital data centers was part of the IPO proposition of SpaceX. Other start-ups, like Cowboy Space have also raised significant sums to further their orbital data center plans.²²

IV. The current legal framework for space activities

Space activities do not happen in a legal void but are subject to international, regional and domestic regulation. The interplay between the different applicable rules can create legal uncertainty or friction.

¹⁴ [Axiom Space – World's First Commercial Space Station](#), accessed on 10 July 2026.

¹⁵ [Haven-1 – Vast](#), accessed on 10 July 2026.

¹⁶ [Starlab Space | A new era of space exploration has arrived](#), accessed on 10 July 2026.

¹⁷ [Orbital Reef | The New Space Station | Sierra Space](#), accessed on 10 July 2026.

¹⁸ Jeff Foust, [Redwire pushes into space pharmaceutical business](#), 11 August 2025, *SpaceNews*, accessed on 10 July 2026;

Jeff Foust, [Varda to collaborate with United Therapeutics on microgravity drug research](#), 13 May 2026, *SpaceNews*, accessed on 10 July 2026;

Jeff Foust, [Vast signed additional partners for commercial space station microgravity research](#), 24 June 2026, *SpaceNews*, accessed on 10 July 2026.

¹⁹ Jeff Foust, [Interlune wins Nasa contract for helium 3 extraction payload](#), 4 May 2026, *SpaceNews*, accessed on 13 July 2026.

²⁰ Jeff Foust, [Nasa selects four companies for initial moon base awards](#), 26 May 2026, *SpaceNews*, accessed on 13 July 2026.

Jeff Foust, [ispace redesigns lunar lander, introduces lunar communications service](#), 27 March 2026, *SpaceNews*, accessed on 13 July 2026.

²¹ [Moon to Mars | NASA's Artemis Program - NASA](#), accessed on 13 July 2026.

²² Jason Rainbow, [Cowboy raises \\$275 million to build rockets with orbital data centers upper stages](#), 11 May 2026, *SpaceNews*, accessed on 14 July 2026.

For space investors and space industry operators, it is crucial to be aware of the applicable legal framework, to know how to navigate between the different systems, and to identify legal voids early, in order to be able to anticipate and mitigate risk to the best extent possible.

1. Mitigating international legal and political risk in the space sector

At the international level, space activities are governed by five international treaties signed in the 1960s and 1970s in the context of the United Nations. In addition, so-called soft law in the form of non-binding guidelines, provides guidance on issues such as space debris mitigation and sustainability considerations. Finally, the International Telecommunications Union (ITU) is administering the use of the radio frequency spectrum and of orbital positions. The international rules are supplemented by regional and domestic law.

1.1 Unresolved issues under international space law

The legal framework governing space activities remains incomplete, is fragmented and, most importantly, facing a shifting geopolitical context. This is not without risks for space operators and investors. The main risks space operators and investors are facing can be divided into risks stemming from: **1)** unresolved issues under international and domestic space law; **2)** risks relating to a fragmentation of the applicable legal framework and the requirement to comply with a variety of different national and international regulations; and finally, **3)** the geopolitical context and the increasing military role of space activities, which creates new markets for the space industry but also increases their exposure to regulatory and even physical risks.

1.1.1 Collision risk between active satellites

The increase in satellite constellations heightens the risk of collisions between active satellite of different operators. As of now, no international space traffic management system exists, not even a binding protocol in case of a collision warning. Several public and private satellite tracking

systems exist but their data is not coordinated. There are still no uniform rules on how to react to a collision warning. The cost of collision avoidance manoeuvres increasingly has to be factored into financial projections. In addition, the risk of collisions is impacting the availability of space insurance and constitutes a particularly serious risk for crewed space operations, such as commercial space stations and future space tourism operations.

1.1.2 Resolution of liability claims for damage caused by space objects

Under international space law, liability for damage caused by space objects falls upon the state that launched the object in question. Liability is absolute if the damage occurs on earth or to aircraft in flight, and fault-based if it occurs in space. It is always the launching state, which is liable, including for space objects operated and/or launched by private entities, and states have different approaches on whether and how they require private operators to compensate the launching state for any international liability caused by private entities. Under international space law, it is also states, that can claim for compensation for damage caused to them or to one of their nationals. This international state-to-state system does not provide for claims by or against private operators. Consequently, private operators who experience damage to their space objects, for example through a collision, need to resort to diplomatic protection or bring their claims to domestic courts, where they risk facing obstacles related to sovereign immunity, doubts about the competent court and the applicable law, potential bias and possibly judges without expert knowledge of the subject-matter. Conversely, the fact that the launching state, not the operator, is liable under international law, does not protect private operators from tort claims in domestic courts.

1.1.3 Protection of intellectual property (IP) rights in space

IP rights are granted and enforced within the territory of a state. Space, however, is outside of the territorial jurisdiction of any country, which causes doubt over the protection against the misuse of protected rights in space. At the same time, the protection of inventions made in space is

equally in doubt. Arguably, the law of the state of registry of a space object could apply to inventions made on that space object, for example a commercial space station. However, the question becomes more complex on celestial bodies such as the moon.

1.1.4 Delimitation between air and space law

There is no internationally accepted definition of where a country's air-space ends and where space begins. In the absence of an international definition, some states define this delimitation unilaterally. This creates legal uncertainty, which could play a role in future insurance disputes, for example in operations at the intersection between air and space, such as certain space tourism propositions.

1.1.5 Legal uncertainty surrounding space resource exploitation and safety zones

The return to the moon is approaching and with it, interest is growing in space resource exploitation. Under international space law, space cannot be appropriated through any means. This had long been understood to preclude so-called commercial space mining activities, at least without an international framework governing the equitable distribution of any gains. Since 2015, the United States, Luxembourg, Japan and the United Arab Emirates have, however, enacted domestic laws allowing for commercial space mining activities. In addition, in 2020, the United States initiated the Artemis Accords, a set of principles for collaboration in space, the signing of which is a requirement for participation in the Artemis missions directed at the return to the Moon. By July 2026, these agreements had been signed by 70 countries. According to the Artemis Accords, the commercial exploitation of space resources is compliant with international space law as it does not require any sovereign appropriation. The Artemis Accords also provide for the establishment of safety zones around future mining zones. The legality of such zones is more controversial as their scope and duration is not clearly defined, there is concern that they could fall under the appropriation prohibition. This legal uncertainty could impact commercial space mining operations and would also affect any other

quasi-permanent structures on the moon or on other celestial bodies.

1.1.6 Lack of international regulation of in-orbit servicing, assembly and manufacturing (ISAM) activities

No agreed international standards or rules exist regarding the regulation of ISAM activities. Such activities include diverse business propositions ranging from the refuelling of satellites in space, to debris removal in space, to the production of solar panels in space. A number of states have already enacted domestic laws to regulate this emerging field but no agreed international standard exists on if, and under which conditions, to license such operations.

2. A fragmented and changing legal framework

The legal and political framework governing international space activities has a significant impact on the risk profiles of all stakeholders in the space industry. Whilst the existing framework of international law sets out key legal principles, a multitude of practical issues remain unregulated. The following sub-sections highlight these problem areas by way of example.

2.1 Sustainability concerns

The increase in space objects being launched causes an increase in space debris, which, in turn, increases the risk of collisions with pieces of debris. There is fear that this could lead to a cascading reaction, which in the worst-case scenario could render certain orbits inoperable. There is international soft law on the mitigation of space debris, with which many operators voluntarily comply, but these rules are non-binding, and different states impose different rules on their national space operators. As a result, private space operators must comply with different rules in different jurisdictions. As compliance with certain standards could be considered in determining fault in case of a collision resulting in damage to another space object, space operators are well advised to carefully review and follow the applicable regulation and best practices to the extent possible. Another sustainability concern has arisen through the

increase in launching activities, which, for instance in case of coastal space-ports may impact industries such as fishing. Finally, the increase in satellites being launched is said to obstruct the work of astronomers, who as a result defend the right to a dark and quiet night sky. States are starting to impose additional measures on satellite operators to mitigate such disruptions and operators are well advised to follow these developments closely.

2.2 The upcoming EU Space Act

Motivated, *inter alia*, by sustainability concerns, on 25 June 2025, the European Commission published a proposal for a Regulation on the Safety, Resilience and Sustainability of Space Activities in the Union, the EU Space Act. The proposal seeks to harmonise requirements on safety, cybersecurity, resilience and sustainability among the EU member states to reduce regulatory fragmentation. However, while no final comments can be made before the final version is available, it is feared that the EU Space Act could significantly increase the regulatory burden for EU space actors and space actors from third countries, and thereby affect the competitiveness of the European space industry. The EU Space Act is currently undergoing the legislative process in the European Parliament.

2.3 Data storage and processing rights

According to international space law, the state, which registers a space object (the state of registry), retains jurisdiction and control over that space object. This arguably includes domestic law on data storage and processing. As the ensuing obligations can be burdensome, the applicable law should be taken into account as a factor in the structuring of space operations in view of influencing, where possible, which state acts as the state of registry and applies its laws to the space object in question. For earth observation constellations, the principal legal issues concern the collection, transfer, storage and downstream use of data, rather than only the space segment itself. The applicable framework may include earth observation licensing rules, data access regimes and, where relevant, data protection law if information can be linked to identified or iden-

tifiable persons. Planned data centers raise related issues, including data-localisation requirements, restrictions on cross-border data transfers, cybersecurity obligations, critical-infrastructure regulation, contractual control over hosted datasets, and public-law permitting for site development and operation. Because these questions are often jurisdiction-specific, the legal position may remain unclear where remote-sensing data, cloud processing and multi-country storage architectures are combined. Careful regulatory mapping and a clear allocation of compliance responsibility are therefore essential.

2.4 Inexistent licensing structures and diverging licensing requirements

A final issue worth mentioning concerns the difference in licensing procedures and licensing requirements between different states. This concerns licenses to launch or operate space objects, for example. As new states enter the space industry, they have to adapt their national regulations to adequately regulate their national space actors. Under international space law, states are required to authorise and continuously supervise their national space activities. How the authorization and supervision must take place in practice is left up to the individual states. A 2013 United Nations General Assembly Resolution contains recommendations on national legislation relevant to the peaceful exploration and use of outer space,²³ but the implementation differs between different states. Germany, for example, does not have a national space law. In the absence of general legislation covering all aspects of space activities, certain aspects, such as the licensing of frequency rights, or the operation of earth observation satellites, are regulated by specific legislation. Novel and complex issues such as launch licenses from new spaceports or operating licenses for earth observation constellations require a detailed analysis of public international law and *lex specialis*. In practice, domestic frameworks can differ significantly and force launch and other space operators to carefully review the applicable regulations in all relevant jurisdictions, and if required, collaborate with the domestic authorities to set up the necessary systems.

²³ [Recommendations on national legislation relevant to the peaceful exploration and use of outer space](#), 11 December 2013, UN Dok. A/RES/68/74, accessed on 14 July 2026.

3. Geopolitics and a changing security context

As already pointed out, the increasing commercialisation of space is taking place against a backdrop of intensifying geopolitical competition. Space infrastructure, spectrum allocations and orbital resources are becoming strategic assets of great importance in both economic and security terms.

3.1 Competition over the radio frequency spectrum

The growing number of satellite constellations is straining the rules of the ITU, as the radio spectrum is a finite resource which has to be shared amongst an ever-growing number of users. This increases the risk of harmful frequency interference, which can impact downstream users of satellite services with potentially serious financial consequences. There is also growing competition amongst states and operators over certain frequency bands. This competition, combined with shifting geopolitical power constellations, can motivate states to prioritise national operators to the detriment of foreign entities. A new plan outlined by the European Commission in May 2026, for example, suggests reserving two-thirds of the 2 gigahertz mobile satellite spectrum for EU operators. Finally, operators are obliged to obtain an ITU authorisation as well as local approval to offer satellite capacity or connect traffic into a national territory, which can create legal risks for operators when there is delay or tension between an operator's international coordination status and national authorisation requirements.

3.2 The new space race to the moon

As mentioned above, there are competing projects for the return to the moon. It is expected that the resources available on the moon are limited or concentrated in certain lunar zones, which renders access to such zones crucial for commercial as well as geopolitical power considerations. Mirroring the competition over spectrum on earth, there is also already an increase in frequency filings for lunar orbits. Investments in lunar activities could be affected by changes in regulation motivated by geopolitical

considerations and are thus exposed to a certain level of legal and political risk.

3.3 Enhanced screening of foreign direct investment (FDI) in space technology

Recent conflicts have shown the importance of space capabilities in modern warfare, thereby leading to a changed understanding of access to space and to satellite services. The blocking of Starlink services for Russia, for example, while allowing Ukraine to use Starlink by Elon Musk has an increasing impact on the frontlines in the Ukraine war. As space technology is increasingly considered to be relevant for national security and to form part of a state's critical infrastructure, foreign investments into the space sector are undergoing renewed scrutiny. This includes enhanced FDI screening at the outset of an investment but can also impact existing investments when the risk perception changes significantly. The consequences of changing national security regulations affects, for example, already the use of technology from Chinese companies Huawei and ZTE in the European telecommunication sector.²⁴

3.4 Public procurement

To the extent that the space activities in question are considered to fall within the defence sector, specific public procurement rules apply in the EU and on national levels, which companies have to navigate. Key pitfalls include rules on origin (of bidders and/or products) and IP sovereignty rules, requirements relating to the trustworthiness of corporate structures, broad disclosure obligations of IP rights and source codes, the local availability of software updates and upgrades throughout a system's operational lifecycle, and market access rules. In summary, companies interested in public procurement contracts in the defence-related space industry in the EU are well advised to undertake comprehensive regulatory due diligence well in advance, screen their supply chains for third-country components, establish classified information-compliant infrastructure at an early stage, secure or develop IP rights from within

²⁴ [EU recommends member states to not use Huawei, ZTE in connectivity infrastructure | Reuters](#), accessed on 14 July 2026.

the EU, and structure their corporate governance to meet trustworthiness requirements.

3.5 Export control regulations for dual-use space technology

Almost all space technology is dual-use technology, meaning that it can be used for both civil and military purposes. In practice, this means that most often the export of space technology is subject to regulatory approvals. This does not only apply to space hardware but also to software and certain data sets. Strict export control regulations have, for example, an important impact on the launch sector. With launch options still limited, space objects and launch rockets often have to cross borders to reach the spaceport from which they will launch. Unexpected changes in export control regulations can therefore have a significant impact on the business plans of both launch companies and space operators. In cases of completely unexpected, arbitrary or discriminatory changes, international investment agreements or contract-based investment protections can provide relief.

3.6 Other implications of the dual-use nature of space technology

The blurring of the lines between civil and military space activities does not only impact the FDI screening of space investments and export control regulation of space technology but also increases the risk for space operators to find themselves at the center of hostile attacks. Consequently, the security requirements for space operators to protect themselves both against cyber-attacks, and physical attacks in orbit but also during the transport of space objects to a launch site, are also increasing and require appropriate responses and proactive security measures from space operators.

V. Take-aways

The space industry is evolving rapidly and the international legal framework lags behind these developments. At the domestic level, states' willingness and ability to set up adequate regulation differs from one state to the next. This leads to an incomplete, fragmented and changing legal framework, which is increasingly impacted by security and geopolitical power considerations.

In this context, space operators are well advised to protect their interests by: **1)** closely analysing the applicable legal framework as well as the geopolitical situation; **2)** making strategic choices on how to structure their operations, which take into account the impact of the applicable law, including the resulting protections and risks; **3)** complying with best practices wherever possible and lobbying for effective domestic legal frameworks; **4)** seeking (political) insurance when appropriate; **5)** carefully drafting contractual protections, including an efficient dispute settlement mechanism, and including in contracts with a state or state-owned entities; and **6)** ensuring coverage by international investment agreements such as bilateral investment treaties or free trade agreements containing an investment chapter.

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