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# Space Law 2025

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Luxembourg: Law and Practice Sigrid Heirbrant, Ottavio Covolo, Vincent Wellens and Isabelle Absalon NautaDutilh



# **LUXEMBOURG**

### Law and Practice

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# Belgium Germany Luxembourg Luxembourg City France

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NautaDutilh is an international law firm with offices in Amsterdam, Brussels, London, Luxembourg, New York and Rotterdam. With over 400 lawyers, notaries and tax advisers, it is the largest independent law firm in the Benelux countries. The Space team within NautaDutilh specialises in navigating the complexities of the space and satellite industries. The lawyers offer extensive expertise in regulatory compliance under space laws, telecommunications and media laws, as well as in areas such as competition law, foreign investments, intellec-

tual property, cybersecurity and data protection. Additionally, the team provides advice on export control matters related to dual-use assets and technologies. The Space team also supports clients with commercial space contracts, in public procurement processes, with the financing of satellite projects, and in M&A transactions in the space and satellite sector. Its clients range from global private enterprises in the space sector to governmental bodies such as the Luxembourg state.

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**AVOCATS LUXEMBOURG** 

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### 1. Global Trends

# 1.1 International Legal and Regulatory Developments

### **International Legal Developments**

The Grand Duchy of Luxembourg ("Luxembourg") is a party to the four main UN space treaties:

- the UN Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (the "Outer Space Treaty");
- the UN Convention on International Liability for Damage Caused by Space Objects (the "Liability Convention");
- the UN Convention on Registration of Objects launched into Outer Space (the "Registration Convention"); and
- the UN Agreement on the Rescue of Astronauts, the Return of Astronauts, and the Return of Objects Launched into Outer Space (the "Rescue Agreement") for which Luxembourg is preparing national legislation for the approval thereof.

Although Luxembourg is not a party to the Agreement Governing the Activities of States on the Moon and Other Celestial Bodies (the "Moon Agreement"), it is a founding member of the Artemis Accords that set out principles for the peaceful and responsible exploration of the Moon and other celestial bodies. Luxembourg is the first European country to allow private entities to legally own resources extracted from the Moon or other celestial bodies, an international trend that can be observed in other countries, such as the USA, the United Arab Emirates and Japan.

Luxembourg actively engages in international relations in the field of space and has established multiple bilateral memoranda of understanding such as with the USA, Canada, India and the United Arab Emirates.

### **European Legal Developments**

On 25 June 2025, the European Commission proposed an EU Regulation on the safety, resilience and sustainability of space activities in the Union (the "EU Space Act"), pursuing a harmonised legal framework within the EU. Once passed, the EU Space Act is expected to have a major impact in all member states, including Luxembourg, as it contains minimum key rules for tracking space objects and mitigating space debris (safety), ensuring physical and cybersecurity requirements to protect European space infrastructure including ground segments (resilience), and assessing the environmental footprint of their space activities (sustainability).

# 1.2 NewSpace and the Space Tech Economy

Luxembourg is known for its well-established satellite economy, particularly due to the success of SES, Europe's first private satellite operator established 40 years ago, which has grown into one of the world's leading satellite companies.

With its emerging NewSpace industry and prominent role in both space exploration and the commercial space sector, Luxembourg now also stands as Europe's pioneer in the field of space resources. The launch of the SpaceResources. Iu initiative in 2016, followed by the creation of the Luxembourg Space Agency (LSA), laid the foundation for a national framework aimed at promoting the peaceful and sustainable utilisation of resources from celestial bodies. The LSA counts among its core missions the develop-

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ment and promotion of the Luxembourg space ecosystem, with a focus on NewSpace.

Luxembourg's Space Resources Act allows for the appropriation of space resources by private entities and is the first of its kind in Europe, and Luxembourg is the second country worldwide to do this after the USA. With the European Space Resources Innovation Centre (ESRIC), Luxembourg also hosts the world's first innovation centre dedicated to space resources. Notable infrastructure developments include the LSA Data Center and the future Space Campus, with initial buildings projected to be operational in 2026.

# 2. Space Legal and Regulatory Framework

### 2.1 Characteristics of the Space Industry

Luxembourg embarked on its space journey in 1985 with the creation of SES, which has since grown into a global leader in satellite communications and broadcasting. It is traditionally known for its well-established satellite industry. In 2005, Luxembourg advanced its space sector development by joining the European Space Agency, marking a significant milestone in its commitment to space exploration and innovation.

Luxembourg's expanding space ecosystem includes more than 80 companies, from start-ups to global enterprises, and research institutions, and it employs over 1,400 professionals. Luxembourg space companies are engaged in a wide range of activities, in relation to the ground segment as well as the space segment, such as satellite manufacturing, satellite communications services, earth observation, spectrum monitoring, AI, onboard software, ground sta-

tion development, equipment and operations, in-orbit servicing and robotic payloads.

With a strong legal and regulatory framework, Luxembourg offers legal certainty and encourages private investment in space ventures. Several types of aid and support are available to businesses, and private-public collaboration is encouraged.

# 2.2 Legal System and Sources of Space Law and Regulation

The Luxembourg legal system is based on a civil legal system. The main space laws and regulations are:

- the Space Activities Act of 15 December 2020, which contains a prior authorisation requirement and other requirements for carrying out any space activities except space resources activities (the "Space Activities Act");
- the Space Resources Act of 20 July 2017, which contains a prior authorisation requirement and other requirements for carrying out space resources activities (the "Space Resources Act");
- the Electronic Media Act of 27 July 1991, as amended, which regulates the concession for satellite systems;
- the Electronic Communications Act of 17 December 2021, which applies to satellitebased telecoms networks and services;
- the Radio Frequencies Act of 30 May 2005, as amended; and
- the Export Control Act of 27 June 2018.

In addition to its existing space laws, Luxembourg is also preparing laws (i) on the use of sensitive very high-resolution Earth observation data, and (ii) approving the Rescue Agreement.

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The European Commission recently published the proposed EU Space Act, pursuing a harmonised legal framework within the EU in the areas of safety, resilience and sustainability, as discussed in 1.1 International Legal and Regulatory Developments.

# 2.3 Role of the State in Space Law and Regulations

The Luxembourg state plays a pivotal role in fostering a vibrant space industry through strategic initiatives, legal frameworks and publicprivate partnerships. It also acts as a regulator concerning the authorisation and supervision of space activities, the use of radio frequencies and orbital positions for satellites, concessions for space systems and, more generally, the adoption of The LSA operates under the responsibility of the Ministry of Economy and is a businessoriented agency supporting the development of Luxembourg's space industry. Its core missions include implementing the national space economic development strategy and policy, managing the SpaceResources.lu initiative and overseeing international relations in the space sector. The agency represents Luxembourg within the European Space Agency and EU-related space programmes. It also contributes to the United Nations' work on space-related matters and is in charge of the registration of space objects.

### **ILR**

The Luxembourg Regulatory Institute (ILR) is the independent supervising authority in the fields of, among others, electronic communications, radio frequencies and NIS. It manages and oversees the use of radio frequencies, monitors spectrum usage and resolves interference issues. The ILR is, moreover, the authority in charge of NIS(2)-related registrations and notifications.

### **SMC**

The Luxembourg Department of Media, Connectivity and Digital Policy (SMC) operates under the responsibility of the Minister of Communication and Media and is in charge of granting concessions for the use of frequencies and orbital positions for satellites.

# 2.4 Role of the State in the Licensing Process for Space Activities

Luxembourg has separate yet similar authorisation regimes in place for (i) general space activities and (ii) space resources activities.

# Space Activities (Other Than Space Resources Activities)

Pursuant to the Space Activities Act, any space activities or missions, other than space resources activities, conducted (i) from the territory of Luxembourg or (ii) from another territory or an international territory by Luxembourgish nationals or legal entities require prior authorisation from the Minister of the Economy.

To obtain such an authorisation, the operator must provide proof of its registered office and central administration in Luxembourg, as well as good corporate governance, professional and financial guarantees, and submit a risk assessment of the envisaged space activity. Once authorised, the mission will be continuously supervised by the Ministry/LSA. Operators are required to notify the Ministry of any change of management, change of company auditors, or change of control exceeding certain thresholds. Moreover, any transfer of space activities must be authorised by the Ministry.

### **Space Resources Activities**

Like general space activities, the exploration and use of space resources require a prior ministerial authorisation per the Space Resources Act.

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To obtain such an authorisation, similar requirements apply as imposed by the Space Activities Act. Once authorised, changes in management or auditors or any other substantial information must be notified to the Ministry.

# 2.5 Role of the State in Co-Ordinating the Use of Radio Frequencies and Orbital Slots

# Co-Ordination and Use of Radio Frequencies and Orbital Slots

The use of radio frequencies and orbital slots is regulated in Luxembourg and, in principle, subject to prior authorisation. Assisted by the SMC and the ILR, the Minister of Communications and Media is responsible for granting concessions for the use of frequencies and the allocation of orbital slots for satellite systems. The ILR is, however, in charge of the day-to-day management of the radio spectrum, frequency co-ordination and the evaluation of frequency applications.

# Interference Consultation and Conflict Resolution

In the case of harmful interference or regulatory infringements, the Minister of Communications and Media can take several actions such as withdrawing the licence, prohibiting any further use of the equipment concerned and/or imposing an administrative fine.

In cases of interference beyond the national level, dispute resolution mechanisms are commonly handled through diplomatic efforts and the International Telecommunications Union.

# 2.6 Role of the State in the Launching Process

Luxembourg does not own a launching facility, and currently no launches take place from Luxembourg territory. However, the Space Activities Act also applies to launching activities outside Luxembourg carried out by Luxembourg nationals or Luxembourg companies.

# 2.7 Commitment to International Treaties and Multilateral Discussions

As discussed in 1.1 International Legal and Regulatory Developments, Luxembourg is a party to the four main UN space treaties. Luxembourg has been an active member of the Committee on the Peaceful Uses of Outer Space since 2014 and a participant in the Conference on Disarmament since 1997.

Luxembourg's domestic space laws implement and ensure compliance with international legal instruments such as the Outer Space Treaty, the Liability Convention and the Registration Convention. Additionally, it has established multiple bilateral memoranda of understanding with other countries (see 1.1 International Legal and Regulatory Developments). It further ensures adherence to international guidelines and best practices for responsible space activities such as the UN Space Debris Mitigation Guidelines by evaluating space missions and their risk assessments before granting any space activities/resources authorisations.

Private space operators can be held fully liable for damages caused in the course of their space (resources) activity, including during preparatory works.

# 2.8 Insurance and State Measures on Liability for Damages

Space operators can be held fully liable for damages caused in the course of their space (resources) activity. No liability cap or liability assumption below or beyond certain thresholds apply under Luxembourg space laws. Damage is defined as any harm to persons, property, public

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health or the environment directly caused by a space object in the course of a space activity, excluding the consequences of use of the signal emitted by that object for users.

Before granting a space activity authorisation, the Ministry of Economy will evaluate the risks of the space activity. Space operators must prove that they can cover the risks of their space activities through their own financial resources, an insurance policy or a bank guarantee. The risks are assessed on a case-by-case basis, and there is no specific threshold defined by law. Insurances to cover Luxembourg space activities are typically obtained through specialised global insurance markets (primarily in London) rather than locally.

# 2.9 Very High Altitude Legal and Regulatory Framework

The current Luxembourg legal and regulatory framework does not yet address the delineation of very high altitude activities, either through its space laws or its aviation laws. It is assumed that Luxembourg follows international norms that recognise the Kármán line as the conventional boundary between airspace and outer space.

# 3. Rules Applicable to Space Operators' Activities

### 3.1 General Rules on Space Activities

The Space Activities Act governs activities consisting of (i) the (attempt to) launch into outer space, (ii) the control over a space object, (iii) the use of a space object in outer space, or (iv) any other activity taking place in outer space for which Luxembourg can be held internationally responsible or liable.

Space mining is, however, excluded from the scope and is separately regulated by the Space Resources Act. The latter allows the private ownership of space resources extracted from the Moon or other celestial bodies, essentially enabling companies to trade in resources and create return on investment.

With regard to the processing of space data and cybersecurity rules, please refer to 4. Data Protection and Cybersecurity.

# 3.2 Principles of Non-Interference and Prevention of Harmful Interference

When granting licences under the Space Activities Act or Space Resources Act, Luxembourg evaluates the operator's technical and operational safeguards to prevent interference with other operators or missions. Although not specified in detail by law, the operator should be prepared to provide detailed information on its risk mitigation measures to avoid collisions, orbital interference or other harmful activities. For the co-ordination of the use of radio frequencies and orbital slots, please refer to 2.5 Role of the State in Co-Ordinating the Use of Radio Frequencies and Orbital Slots.

In the future, the EU Space Act will lay down safety requirements and promote voluntary adherence to high standards of protection of space activities by introducing a Union Space (Safety) Label.

### 3.3 Operators' Responsibilities

Operators' general obligations are set out in the Space Activities Act and Space Resources Act. An operator may only carry out space activities that comply with the conditions or restrictions stemming from its space authorisation issued by the Ministry of Economy as well as with the inter-

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national obligations of Luxembourg, for example those laid down by the Outer Space Treaty.

Furthermore, operators are subject to integrity and transparency requirements. Shareholders and management are not only assessed as part of the licence application process; while holding the licence, operators are required to notify the Ministry of any changes of management, changes of company auditors and changes of control that exceed certain thresholds. Moreover, any transfer of space activities must be authorised by the Ministry.

On the national level, Luxembourg currently has no guidelines or regulations in place to minimise environmental impacts or in relation to ESG for space activities, or to protect areas of special interest, such as lunar heritage sites or scientific research zones.

Luxembourg's national civil and defence interests can be safeguarded by the Ministry of Economy at the level of the prior authorisation and, once authorised, by continuous supervision of the space activity. The state retains control over transfers of mission control and object ownership and, if needed, can impose defence-related safeguards in the authorisation terms.

# 4. Data Protection and Cybersecurity

# 4.1 Data Protection Regulation and Space

Luxembourg is preparing a law on sensitive very high-resolution Earth observation data. Luxembourg's National Space Strategy recognises the potential of space data for a broad range of applications beyond the space industry. The LSA Data Center is therefore one of the country's strategic projects to broaden access to spacebased data (see 4.2 Space Data Spaces). It offers free and open access to data products stemming from the Copernicus Sentinel constellation and is primarily intended to provide highperformance/premium access to Luxembourg users.

From a business-to-business perspective, the processing of space data – including the access to, and protection, sharing and interoperability of, space data sets - is mainly governed by contractual arrangements which are mainly subject to general contract law. Any processing of space-based data qualifying as personal data (which may be common in the context of spacebased telecoms or imagery applications) must comply with rules laid down in the EU General Data Protection Regulation. Unilaterally imposed contract terms concerning access to and the use of space data will have to comply with the rules of the EU Data Act as from 12 September 2025. Businesses should also contractually agree on confidentiality, (intellectual) property rights and trade secret aspects where relevant.

The transfer of space data to third countries is not specifically regulated. In strategic sectors such as space and finance, Luxembourg aims to generate large volumes of high-value data with a strong emphasis on quality. Luxembourg places a high priority on facilitating cross-border data flows. To ensure secure and responsible data exchange, Luxembourg works closely with EU member states and key international partners to develop robust legal and technical frameworks in this respect.

Finally, if space data can be classified as a dualuse item, its transfer must comply with the applicable dual-use regulations of Luxembourg and the European Union.

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### 4.2 Space Data Spaces

Although no domestic laws specifically govern space data spaces, Luxembourg has several national space data spaces of its own.

The LSA Data Center offers free and open access to data products stemming from the Copernicus Sentinel constellation. All data are indexed in a real-time updated geo-catalogue which can be searched and downloaded. Users can also guery the archive based on specific search parameters such as orbit, product type and cloud coverage, and select the desired products for download. The objective of the LSA Data Center is to boost the development of value-added applications and services using this data, making it easier for users to adopt and benefit from them. Two levels of service - standard and premium - are offered. Although open, the LSA Data Center is intended to provide high-performance access to Luxembourg users.

Moreover, Luxembourg hosts a major Space Analytics Data Lake which is accessible to start-ups, public agencies and research institutions with a footprint in Luxembourg. It offers free access to high-quality Earth observation and other space datasets such as vessel and flight tracking information and weather data. Access must be requested, and usage is in principle limited to non-commercial research and development activities. Upon validation of the request, access is granted for three months (extendable).

Luxembourg is actively involved in both the technical infrastructure and ecosystem-building of the future European Space Data Space. Luxembourg will host one of the three strategic control centres for the innovative IRIS<sup>2</sup> constellation (Infrastructure for Resilience, Interconnectivity and Security by Satellite), one of the building blocks of the European Space Data Space, by

ensuring secure and resilient satellite communication. Furthermore, the Luxembourg company SES leads the SpaceRise consortium tasked with the design, delivery and operation of the future IRIS<sup>2</sup> constellation.

### 4.3 Cybersecurity and Space

The Space Resources Act and Space Activities Act generally require space operators to have adequate internal control mechanisms and control and security arrangements for their technical systems and applications proportionate to the risks of the mission. Currently, those laws do not contain more specific measures concerning space infrastructure cybersecurity.

Cybersecurity as well as reliable and highly secure satellite communications are, however, high on the agenda in Luxembourg. The development of a QKD (quantum key distribution) satellite is one of Luxembourg's strategic priorities. Moreover, after the successful and fully booked GovSat-1 satellite, Luxembourg announced its intention to finance the GovSat-2 satellite for EUR501 million in order to meet the exponential demand for secure satellite capacity for NATO, the European Union and several international partners.

The EU NIS2 Directive sets out cybersecurity requirements for operators of ground-based infrastructure supporting space services. Companies in charge of ground stations, data centres and other critical facilities used by space systems are required to implement stronger security measures and report any cyber incidents. Luxembourg is currently implementing the directive. Awaiting the formal adoption of the law, organisations can already self-register on the website of the ILR.

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In the future, companies managing either ground segments and/or space segments may have to consider the cybersecurity requirements of the EU Cyber Resilience Act (in force as from 11 December 2027) and the EU Space Act (currently foreseen to apply as from 2030).

# 5. Environmental Protection and Impact on Climate Change

### 5.1 Environmental Protection in Space

Currently, neither the Space Resources Act nor the Space Activities Act provide for measures or conditions related to environmental protection on Earth or in orbit. Although the draft bill of the Space Activities Act provided for the operators' obligation to take measures to protect the terrestrial and space environment and limit the risks created by space debris, such provisions had disappeared from the final adopted version of the act.

Applicants should nevertheless be prepared to provide information on the environmental impact of their envisaged space activities in the course of their application procedure under the Space Activities Act or Space Resources Act. In the future, the EU Space Act will require operators to calculate and declare the environmental footprint of their planned space activities. As the EU Space Act aims to harmonise licensing requirements, such requirement will then also formally apply in Luxembourg.

Currently, Luxembourg law does not contain provisions on protected zones in outer space or with regard to specific critical space minerals (eg, helium-3). However, critical space minerals fall generally within the scope of the Space Resources Act. Moreover, the national space strategy centres on sustainability. One of its core

pillars is the sustainable use of space resources. The SpaceResources.lu initiative focuses, among other things, on issues of sustainability, circularity and resource management.

### 5.2 Climate Change and Space Activities

Currently, no Luxembourg legislation or proposals explicitly address climate change in relation to space activities. However, the Space Activities Act holds operators fully liable for any damage caused in the course of their space activities – including environmental damage.

In May 2025, the European Investment Bank and the LSA announced their partnership "Space for Finance" to boost the use of space data in the financial sector aiming to improve financial services' reporting and sustainability efforts through innovative satellite-based solutions.

One of the flagship projects of Luxembourg's recent Data Strategy Plan is the "Sustainability in Space" initiative. The project will involve the launch of three calls for projects, expected to encourage industrial research and development (R&D) projects in the domains of 'AI for Space Situational Awareness', 'AI for Satellite Health' and 'AI for Onboard Autonomy for In-Orbit Servicing' through attractive financial support.

### 5.3 Orbital Debris

Measures to address environmental concerns in relation to space debris mitigation are to be further developed in national law. In the future, the EU Space Act will require spacecraft operators to draw up space debris mitigation plans, including a debris control plan, an end-of-life disposal plan and a failure response plan.

Luxembourg's national space strategy centres on sustainability. One of the core pillars is to develop and strengthen industry competencies

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in relation to space traffic management (with a view to identifying and/or tracking debris) and in-orbit services (with a view to limiting the creation of and removing debris). Luxembourg announced in its recent Data Strategy Plan to financially support industrial R&D projects in domains such as in-orbit servicing, as mentioned in 5.2 Climate Change and Space Activities.

### 6. Taxation of Space Activities

### 6.1 Tax System for Space Activities

Luxembourg offers an attractive, innovationdriven tax regime that actively supports investments, including in the space sector.

As part of this framework, and subject to certain conditions – one of which is compliance with the OECD's nexus approach – taxpayers may benefit from an 80% exemption on income derived from qualifying intellectual property (IP) assets, such as patents, utility models and software copyrights ("IP Box"). This incentive also applies to IP related to space technologies, provided that such assets were created, developed or enhanced through eligible R&D activities carried out after 1 December 2007.

To further stimulate innovation-driven projects, Luxembourg also offers a tax credit for investments in eligible depreciable tangible assets. The standard rate is 12%, rising to 18% for projects aligned with digital innovation or sustainability goals, with no minimum threshold. While this incentive cannot be combined with the IP Box for the same asset, their concurrent availability may enable space-related businesses to optimise tax benefits in line with their innovation strategies.

In line with these incentives, space-related tangible assets may be depreciated using either the straight-line or an accelerated method, depending on the asset's characteristics and applicable tax rules. Additionally, special depreciation allowances of up to 80% may apply to assets that promote energy efficiency or environmental sustainability, which is potentially relevant for qualifying ground infrastructure or space equipment.

Recognising the high-risk nature of space operations, Luxembourg grants a full tax exemption on insurance premiums related to the coverage of space objects – a significant consideration for operators in this sector.

Beyond corporate incentives, Luxembourg supports talent attraction and retention through flexible compensation mechanisms. These include a participation bonus scheme, allowing up to 50% personal tax exemption on employee bonuses, and targeted exemptions for young professionals, covering certain performance bonuses and housing allowances. These measures enhance the country's appeal as a destination for emerging talent.

Complementing this, interest subsidy mechanisms offer tax-efficient support when employers assist employees through preferential loans or interest reimbursements – further broadening the tools available for competitive remuneration packages.

### 6.2 Tax Incentives for Space Investors

From an investor perspective, Luxembourg offers effective structuring options that optimise capital deployment and enhance returns. Subject to certain conditions, investment returns – including capital gains – may benefit from favourable tax treatment (tax exemptions or credits). Lux-

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embourg's extensive double tax treaty network facilitates the efficient repatriation of profits, reinforcing its attractiveness as a platform for cross-border space investment.

Taken together, these incentives underscore Luxembourg's position as a dynamic hub where space businesses (including start-ups) can attract talent, accelerate innovation and scale efficiently, all within a tax environment designed to support growth, competitiveness and long-term success.

# 6.3 Taxation on Sale or Transfer of Space Assets

Transfers of space assets between related parties – including intra-group reorganisations – are subject to Luxembourg's transfer pricing rules, which require transactions to be conducted at arm's length. This ensures transparency and alignment with international standards.

Beyond related-party transactions, Luxembourg offers favourable tax treatment for capital gains derived from the transfer of qualifying IP assets under the IP Box regime – in particular when embedded in space-related assets. In such cases, taxpayers may benefit from an 80% exemption on the gains realised, helping to sustain investment and innovation in the space sector.

Regarding VAT, the treatment of space assets depends on their nature and status; namely, the sale of space-related assets may fall within the scope of Luxembourg VAT if located within the Luxembourg's VAT territory; otherwise, Luxembourg VAT would not apply.

# 7. Investment and Financing in Space Activities

### 7.1 Impact of NewSpace

As a prominent global financial centre, Luxembourg provides a wealth of resources to support the launch of new space ventures. It serves as a hub for venture capital and private equity firms, alongside alternative funding options such as business angels. Luxembourg hosts several space venture capital funds from which NewSpace companies may benefit, such as:

- the first Luxembourg Future Fund (LFF), which was launched back in 2015 by the European Investment Fund and the Société Nationale de Crédit et d'Investissement. The LFF raised EUR150 million and aims to diversify the Luxembourgish economy and develop it sustainably with investments across various sectors including NewSpace;
- the second Luxembourg Future Fund (LFF 2), which was launched in 2023 as successor of the LFF and raised an additional EUR200 million;
- the Orbital Ventures fund, which was launched in 2020 by venture capital company Promus Ventures, raised EUR120 million and focuses on early-stage companies in the space industry; and
- NewSpace Capital Fund I, which was launched in 2022 by Luxembourg-based private equity fund NewSpace Capital and raised EUR105 million.

In addition, a targeted financial aid programme was introduced in 2025 to support the establishment and funding of spin-off companies. The initiative will offer up to 80% public co-financing per project, with a maximum contribution of EUR200,000, contingent upon at least 20% private investment. In parallel, the plan includes

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the creation of specialised incubators focused on the space sector, among others.

### 7.2 Finance Sources for Space Activities

Space activities benefit from public and private funding opportunities. Private investments typically take the form of private equity investments whereas equity-free public funding provided to specific projects may complement equity and loans.

Luxembourg has partnered with the European Investment Bank to develop and implement innovative financing tools, particularly targeting space resource exploration and utilisation, as well as related applications.

In addition, Luxembourg provides various financial aid and support for businesses, including programmes such as Fit 4 Start (for space start-ups), ESRIC's incubation programme Start-Up Support Programme and its Space Resources Accelerator (which is a world first!), and LuxIM-PULSE (for established businesses).

# 7.3 Attracting Investment for Space Activities

### **Legal Framework**

Luxembourg has a well-developed and business-oriented legal framework including not only a general space activities law but also a dedicated law for the exploration and use of space resources. The Space Resources Law provides stability and strong protections for investors, explorers and miners. Luxembourg was the first country in Europe – and the second globally – to establish a legal framework for the exploration and utilisation of space resources, giving private operators assurance over their rights to (and indirectly, the commercial value of) the resources they extract in space.

### **Tax Incentives**

Luxembourg's tax incentives are strategically designed to promote investment in the space sector (see 6.2 Tax Incentives for Space Investors). As Luxembourg intends to become a toptier innovation hub in Europe, it announced in March 2025 a ten-point action plan to boost its start-up and scale-up ecosystem. The plan includes the introduction of a tax credit for private investments in young, innovative companies (start-ups). For scale-ups, Luxembourg later announced a tax-advantaged regime in addition to the tax regime for impatriates.

### **National Accelerator Programmes**

There are different national accelerators such as Fit4Start for innovative start-ups, ESRIC's incubation programme Start-Up Support Programme and Space Resources Accelerator (which is a world first), and LuxIMPULSE (for established businesses).

# Business-Oriented Space Agency and Space Policy

One of the core missions of the LSA is to promote the commercial space sector in Luxembourg by providing support to the space industry in various ways (developing human resources, facilitating access to financial solutions, supporting R&D activities) and by promoting the Luxembourg space ecosystem internationally.

# 7.4 Foreign Investment in Space Activities

### Foreign Direct Investment Laws

The EU legal framework on investment screening applies fully in Luxembourg. The EU's Foreign Direct Investment Regulation is further implemented in national law by the Luxembourg Foreign Direct Investment Act, which affects investors outside the EU/EEA that wish to invest in a Luxembourg entity that conducts activities on

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Luxembourg territory and is regarded as critical (in the sense that it may affect security or public order) in various sectors, including in the aerospace sector (eg, space operations and the exploitation of space resources). Foreign investors must lodge a compulsory notification with the Ministry of Economy prior to the completion of the investment. Following such notification, the Minister of Economy will decide whether or not the foreign direct investment must be further screened. Once the screening procedure is triggered, the investment must not be completed until a ministerial authorisation has been obtained.

### **Space Activities Law**

In addition, any foreign investment in space activities that would result in the transfer of space activities authorised in Luxembourg, or of real or personal rights having as a consequence that the actual control over the space object is transferred to another operator, is subject to prior authorisation by the Ministry of Economy, per the Space Activities Law. If the transferee operator is not established in Luxembourg, such authorisation will be subject to a bilateral agreement between Luxembourg and the state of which the transferee operator is a national or which has international liability for the space activities thereof.

Finally, a prior notification to the Ministry of Economy is required for acquisitions of qualifying holdings in space operators, whether the investors are nationals or foreign.

### 7.5 Documentation

NewSpace fundraising typically requires:

 a pitch deck, including a detailed product stage and roadmap outlining the current development stage and future milestones,

- information on traction and key metrics (including KPIs, customer acquisition cost, churn rate, etc), and a funding overview including details on the funding needs and plans;
- a summary of the products and services offered, target market, business model, customer segments, sales and market expansion strategy, competitive landscape, unique value proposition, team background; and
- financial planning including both current financials and future projections.

Fundraising through public funding opportunities usually involves comprehensive applications showcasing innovation potential, economic impact, and alignment with national priorities.

### 7.6 Due Diligence

In addition to the regular due diligence checks, a legal due diligence in space-related M&A transactions specifically focuses on, among other things:

- any required authorisations or permits allowing the target company to carry out the relevant space activity in Luxembourg, including a general space activities authorisation or a space resources authorisation, regular business permit and spectrum allocations;
- any required notification or authorisation with the Ministry of Economy in relation to the transaction;
- whether any material grant agreements, funding or consortiums are affected by the change of control as a result of the transaction;
- the ownership and appropriate licensing of intellectual property in relation to the space activity;
- details on any tax incentives used;

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- detailed information on the (information and cyber) security processes that the target company has in place; and
- status of compliance with obligations stemming from sector-relevant regulations, such as export control regulations, cybersecurity regulations, the AI Act and the upcoming EU Space Act, where applicable.

# 7.7 Liquidity Events Ordinary Voluntary Liquidation

In the event of a voluntary liquidation, a liquidator is appointed once the company has resolved to open the liquidation. A notary deed must formalise the resolution. The liquidator represents the company, assesses the balance sheet, realises any remaining assets, collects outstanding receivables, pays debts and draws up the liquidation report. The shareholders meet again to approve the liquidation report and may appoint a liquidation auditor to prepare an audit report, after which a final shareholder meeting is convened to approve the second report and close the liquidation. The process ends with the filing of the liquidation event with the Luxembourg Trade and Companies Register.

### **Simplified Dissolution**

A simplified dissolution is an operation whereby the sole shareholder of the company takes over all assets and liabilities of its subsidiary and the latter is dissolved without a liquidation process. The assets and liabilities (including contingent liabilities) are transferred by means of universal transfer. The entity to be dissolved must not have outstanding tax (eg, VAT or corporate income tax) or social security liabilities. A notary deed must formalise the resolution of the sole shareholder.

### **Judicial Liquidation**

In the event of a judicial liquidation, the Luxembourg courts impose a liquidation, typically when the company is insolvent and can no longer pay its debts. The court appoints a receiver (curator), which handles the liquidation and aims to maximise the value for creditors.

# 7.8 Role of Securities Markets in Space Financing

While Luxembourg's space sector is flourishing, most of its major players are not listed on the Luxembourg Stock Exchange, the leading global satellite operator SES being an important exception. Instead, they are privately held or have their primary listings on other stock exchanges.

### 8. Intellectual Property

# 8.1 Territorial Patent Law v International Space Law

Luxembourg patent law protects patentees against the exploitation of their invention without their consent. In principle, such protection also applies to space-related assets or inventions, although its reach is territorially limited. In short, the prohibition concerns the manufacturing, sale, use or importation of the invention on the Luxembourg territory and does not cover the use of Luxembourg-patented technology in outer space. Currently, no Luxembourg intellectual property rules specifically address space activities and assets.

Furthermore, one of the fundamental principles of the Outer Space Treaty is that outer space is free for exploration, use and scientific investigation by all states. Therefore, the effectiveness of the protection and enforcement of intellectual property rights created or used in outer space remains a grey area.

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Where Luxembourg has quasi-territorial jurisdiction in outer space, it can be argued that Luxembourg patent law applies in outer space. For example, based on Article VIII of the Outer Space Treaty, which provides jurisdiction over objects that a country registers, inventions created or used on Luxembourg-registered space objects in outer space can fall under Luxembourg patent law.

### 8.2 Invention Protection Dynamics

As in any other industry, patents play an important role in protecting innovation in the space industry. Protection is often sought in those countries where technology is developed or commercialised on Earth. In addition, companies may choose to obtain protection in the state of registry of the relevant space object on which technology is developed as that state has jurisdiction over such space object.

Luxembourg NewSpace companies can additionally rely on the Luxembourg legal framework allowing appropriation of space resources (Space Resources Act). Under certain conditions, companies could claim protection over technology based on lunar or asteroid mining (eg, projects involving in situ resource utilisation) given the established legal ownership over the extracted materials.

Innovation in the space sector is often the result of extensive collaboration among multiple stakeholders. Partnerships between private enterprises, government bodies and/or international organisations may lead to shared or joint ownership of intellectual property rights on the results. In such cases, contractual arrangements between the parties are essential to clarify ownership, IP licensing mechanisms and commercialisation opportunities/value creation.

# 8.3 Enforcement of the Patentee's Rights in Space

Currently, no Luxembourg intellectual property enforcement rules specifically address space activities and assets.

The rise of artificial intelligence, particularly in the context of space mining activities, is likely to reduce, or perhaps even eliminate, the need to send materials from and back to Earth. Developing new technology or manufacturing in space is no longer seen as a distant dream. Luxembourg is actively involved in in-situ resource utilisation projects. Moreover, Luxembourg law allows space resources companies to legally appropriate and own the resources they extract from the Moon or other celestial bodies. Combined with its quasi-territorial jurisdiction over Luxembourgregistered space objects in outer space, the country offers a pioneering legal framework that can be especially advantageous for technology developed in space.

### 9. Arbitration and Litigation

# 9.1 Arbitration Agreements in Space Contracts

Space contracts in Luxembourg, similar to other jurisdictions, rely mainly on arbitration as a dispute resolution mechanism, accompanied generally by strict time limits to bring claims and undertakings for representatives of each party to meet in order to negotiate in good faith an amicable settlement before unlocking the possibility to refer to arbitration.

Parties often refer to the International Chamber of Commerce, with the seat being located either in a neutral third country or in the state of one of the parties.

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### 9.2 Investor-State Arbitration

To our knowledge, no records of claims lodged by foreign investors against the state in spacerelated arbitration matters exist, bearing in mind such claims are confidential in nature.

### 9.3 Space Litigation

The space industry in Luxembourg is evolving rapidly, but is yet to encounter serious and widely publicised litigation.

Due to the high risks tied with investments in such industry, disputes stemming from failing projects or unsatisfactory results – for the time being – seem to be resolved amicably (inter alia, through contract renegotiations) or through other internal mechanisms (inter alia, pledges and security being enforced for investors, and insurance claims or similar settlements for the actors).

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