

Introduction

On 20 June 2024, the Italian Council of Ministers approved a legislative decree (the Reform) introducing, for the first time in Italy, a series of provisions on Space Economy. The purpose of the Reform is to regulate access to outer space by entities and private enterprises, which have driven the rapid growth of space commercialization in recent years.

The Reform introduces the definition of “space activities” as the launch, in-orbit management, and re-entry of space objects, and any other activity carried out in outer space, including activities connected to space exploration and the use and exploitation of natural resources in outer space.

The decision to regulate space activities, either carried out within the Italian territories or by Italian nationals in other jurisdictions, closes a decades-long normative gap between Italian domestic legislation and the implementation of the international space law treaties. A necessary step leading Italy to make a giant leap in its national space law legislation.

Duty of Authorization to Engage in Space Activities

One of the cornerstone elements of the Reform is the establishment of a robust authorization process for entities wishing to engage in space activities.

The authorization requirement provided for in the Reform is the implementation of Article VI of the 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), ratified by Italy in 1972, which establishes that “[t]he activities of non-governmental entities in outer space, including the moon and other celestial bodies, shall require authorization and continuing supervision by the appropriate State Party to the Treaty.”

Accordingly, under the Reform, all entities, whether private or public, must apply to the Italian Space Agency for authorization to conduct space-related activities, unless the space activity has been authorized by another state and it is recognized in Italy under an international treaty.

To this end, the authorization process, which is envisioned to last 120 days from the initial application, involves a thorough assessment of the applicant’s technical capabilities, financial stability, and adherence to safety and environmental standards to ensure that only competent and responsible actors are granted access to space, minimizing potential risks while promoting sustainable space activities.

The Italian Space Agency, tasked with supervising entities engaging in space activities, may suspend or revoke the authorization it had granted at any time in the event of, *inter alia*: (i) breach of provisions of the Reform or the obligations arising out of the authorization; (ii) failure to comply with the start-up date set in the authorization for the commencement of space activities; (iii) substantial modification of the purpose of the space activities covered by the authorization; (iv) failure to fulfill the insurance guarantees provided; and (v) any violation of precautionary measures provided to minimize risks to the safety of persons and property, protect the environment, protect public health, national security interests, and the continuity of international relations.

The authorization requirement applies to all space activities conducted by nationals of any states operating within Italian territory, as well as to space activities conducted by Italian nationals outside of Italian territory.

Registration of Space Objects in a National Registry

The Reform intervenes further in relation to registering space objects, implementing the international obligation arising out of the Convention on Registration of Objects Launched into Outer Space (the Registration Convention), ratified by Italy on 8 December 2005. Article II of the Registration Convention provides that “[w]hen a space object is launched into earth orbit or beyond, the launching State shall register the space object by means of an entry in an appropriate registry which it shall maintain.”

Accordingly, the Reform provides for the establishment of a national registry containing a detailed record of all space objects launched from Italian territory or for which Italy is a launching state (i.e., the state procuring the launch). The information required by the Reform is the same as that established by Article IV of the Registration Convention – namely, the denomination of the launching state(s); the denomination of the space object; the launching details (i.e., the date, territory or location of the launch); the orbit parameters of the space object; and the general function of the space object. Furthermore, the Reform provides for additional information to be submitted by the entities wishing to engage in space activities, such as details of the authorization for the space activity; whether the space object is part of a constellation of satellites; the date of the transfer of ownership (if any) of the space object; and any other information that the Italian Space Agency may consider necessary, also in view of regulatory developments and international practices related to registering space objects.

The registration process ensures transparency, identification of space objects and accountability in space activities. By maintaining an accurate and up-to-date registry, Italy can contribute to the global efforts to mitigate space debris and preventing collisions by tracking and monitoring space objects to ensure the long-term sustainability of space operations. Moreover, the registration of space objects supports the Italian government's efforts toward national security by enabling it to oversee potential threats and unauthorized access to space resources.

Liability of Space Actors for Damages Caused by Space Objects

The liability regime for damages caused by space objects is regulated on the international level by the Convention on International Liability for Damages Caused by Space Objects (the Liability Convention), ratified by Italy in 1978, and which is recalled by the Reform. The Liability Convention distinguishes between damages caused by space objects "on the surface of the earth or to aircraft flight" and damage caused "elsewhere than on the surface of the earth." As a result, differentiates liability based on where the damages occur. In the event of damages caused by space object on the surface of the earth or to aircraft flight, the launching state is "absolutely liable to pay compensation," whereas the launching state's liability is based on fault in every other case.

With respect to the liability of entities engaging in space activities, the Reform explicitly considers the scenario in which the damage by the space object occurs on the surface of the earth, to aircraft flight and the individuals and objects therein, providing for strict liability unless it is proven that the damages were caused exclusively and willfully by an unrelated third party. The rationale of the Reform implies that such a mechanism may be extended also to the cases in which damages are caused elsewhere than on the surface of the earth.

To cover any potential damages caused by space objects, the Reform establishes that all entities engaging in space activities are required to take out insurance contracts or other suitable financial guarantees from EUR 50 million up to EUR 100 million per claim. As a result of the obligation to provide an insurance guarantee or other financial security, the damaged party has also the possibility to bring the claim for compensation directly to the insurer, and it is not limited to bring the claim solely to the liable entity engaging in space activities.

Indeed, by defining appropriate remedies for liability, the Reform aims to clearly allocate responsibility to space operators to prevent ambiguity on liability, and to ensure that undue risks or costs related to damages arising out of space activities are mitigated by financial guarantees, and not borne by the states or the victims.

National Space Economy Plan

Central to the Reform is the development of a National Space Economy Plan (Plan), which outlines Italy's vision for the space sector over the coming years. In particular, the Plan encompasses the analysis and quantification of the relevant requirements for innovation and capacity-building that are necessary for the development of the Italian national space economy, the assessment of institutional needs for services and activities based on the use of space technology capable of being commercially exploited, as well as the identification of the synergies to be activated between the various financing and policy instruments useful for the development of the space economy. To promote and financially sustain the activities set forth under the Plan, the Reform provides for the establishment of a dedicated fund, with an initial endowment of EUR 85 million for 2024, EUR 160 million for 2025, and EUR 50 million for 2026.

To further foster national space commercialization, the Reform encourages the creation of public-private partnerships to carry out space activities by providing incentives also for the participation of small and medium-sized enterprises (SMEs) and start-ups in public contracts. In fact, the Reform foresees special procurement rules for these entities by mandating, for example, that in the case where tenders are not divided into lots, 10% of the procurement contract value shall be reserved for innovative SMEs and start-ups. Derogation from this rule is allowed only if there is no business qualified as "innovative" in the sector specified in the tenders.

Conclusion

The Reform represents a significant step toward establishing a national comprehensive regulatory framework while implementing the obligations contained in the international space law treaties. By implementing mechanisms to minimize the risks related to space activities and financially incentivize space commercialization, Italy is positioning itself as a key player in the global space economy, which is set to reach the value of USD 1.8 trillion by 2035.

The Reform sets an unprecedented contribution to the promotion of space activities, with particular regard to private enterprises, SMEs and start-ups, while taking into account the rapid growth in technological development in the space sector and Italy's international commitments to a more responsible and sustainable access to space.

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