



THE 2017 MANFRED LACHS SPACE LAW MOOT COURT COMPETITION

INTERNATIONAL COURT OF JUSTICE

**Case Concerning Lunar Facilities and
Withdrawal from the Outer Space Treaty**

THE REPUBLIC OF PEROVSK

(APPLICANT)

V

THE REPUBLIC OF TITAN

(RESPONDENT)

AGREED STATEMENT OF FACTS



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**CASE CONCERNING LUNAR FACILITIES AND
WITHDRAWAL FROM THE OUTER SPACE TREATY**

Agreed Statement of Facts:

1. Perovsk and Titan are neighboring republics enjoying more than 200 years of peaceful relations, a common language, and a shared cultural heritage. Many Perovsk citizens have ancestors from Titan, and vice-versa. They are simultaneously each other's largest customers for export goods, and each other's largest competitors for global markets. When political differences trouble the relations between these two States, they are often rooted in the republics' differing economic value systems. Perovsk values individualism and *laissez faire* economics, while Titan favors social planning and various combinations of public and private cooperation in business and industry.
2. Titan was one of the first states to ratify the 1967 Outer Space Treaty, as well as the 1979 Moon Agreement, and successive governments in Titan have included the statement in their national space policies that outer space belongs to all humankind. Titan also briefly explored the Moon in the mid-1970s with the robotically-operated missions *Novum Organum-1* and *Novum Organum-2* alighting on the Moon's Sea of Tranquility. Mission architecture for these activities depended on the purchase of launch and descent stage services from Perovsk.
3. In the decade prior to 2020, a series of intergovernmental agreements led both Perovsk and Titan to engage in cooperative space projects and to pursue complementary niche specialization in technologies required for space activities. Perovsk developed highly efficient launch and chemical propulsion capabilities, and evolved creative technologies for materials processing and manufacturing in space. Early results from Perovsk's proof-of-concept experiments in Earth orbit showed considerable promise for creating metal powders in reduced gravity for commercial use in 3D printers.
4. Meanwhile, Titan excelled in instrumentation, spacecraft design, and scientific research. Titan began operations of its lunar station *Mondiale* on the Moon's Sea of Tranquility in 2019. The *Mondiale* station had a mix of scientific projects, including



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scientific testing stations around the main facility that sampled the tenuous lunar atmosphere.

5. The *Mondiale* station was built in Titan and launched from Perovsk's La Mancha Spaceport on a Perovsk-built rocket, and delivered to the lunar surface by a descent unit built in Perovsk launched together with the *Mondiale* station. Perovsk conducted significant review of the *Mondiale*'s various capabilities, including its lunar atmosphere experiments, prior to the launch. Perovsk notified the UN of the launch, which was thereafter placed on the UN's registry of space objects. The rocket and the descent module were both placed on Perovsk's national registry. Concurrently, Titan placed the *Mondiale* station on its national registry of space objects, and on the UN registry, noting that *Mondiale* occupied a 10 square meter footprint on the lunar surface and operated robotically without a human crew.

6. In 2021, scholarly papers, as well as the political and social discourse in both countries, increased pressure on their governments to execute more ambitious lunar missions. The business community in Perovsk wanted to explore the possibility of processing lunar materials into products with commercial value. Titan's scientific community, in alliance with many businesses, wanted to use their *Mondiale* lunar station to receive lunar samples to test and improve the capacity of robotic instrumentation to analyze them.

7. By late 2022, Perovsk was highly focused on final preparations for its own lunar station, *Tekla*, which among other functions, was to serve as a base station for a surface rover. The *Tekla* program was created with considerable involvement of the commercial space sector, as officials made statements in both the national and international press expressing their hopes for a commercial lunar economy. A private enterprise incorporated in Perovsk, Fireskin Ltd., (hereinafter cited as Fireskin), consummated a commercial partnership with One-Zero, Ltd., (hereinafter cited as One-Zero), a private launch services provider also incorporated in Perovsk, to send the *Tekla* station to a site roughly 30 km distant from the *Mondiale* station on the Moon's Sea of Tranquility. Perovsk granted a launch license to One-Zero and mission authorization to Fireskin contingent on assurances from each that the lunar rover later to be included in the mission was not to approach any closer than 5 km from Titan's *Mondiale* lunar station.

8. With a license in hand, Fireskin's spacecraft began its journey to the Moon aboard One-Zero's "Goldrush" heavy-lift launch vehicle. The mission launched from



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Perovsk's La Mancha launch site on the last day of 2023 and was safely delivered to the lunar surface six days later by a Perovsk-built and operated descent unit. Both the launch vehicle and the *Tekla* station were duly listed on Perovsk's national registry of space objects, and on the UN registry of space objects.

9. In 2024, Perovsk unveiled a reusable lunar shuttle to replace the descent unit it had used to deliver the *Mondiale* and *Tekla* stations to the lunar surface. Later that same year, Perovsk's new shuttle transported from Earth a Titanite mobile surveying unit capable of collecting and robotically analyzing samples in a 20 km radius of the *Mondiale* station. Titan fully disclosed to Perovsk the technical capabilities of its rover prior to its delivery to the Moon.

10. In the first quarter of 2025, Perovsk reported publicly through a technical journal published by its space agency that its *Tekla* station was in an area rich in ilmenite, a basaltic titanium ore. Perovsk's report indicated that samples randomly collected within 20 km of its lunar station showed an average titanium content of 20 percent, with certain samples approaching 30 percent.

11. Critical of Titan's lack of transparency regarding scientific discoveries associated with its work around the *Mondiale* station, the article also reported finding evidence that more than one of the ilmenite deposits had been visited and analyzed previously by Titan's rover, whose tread pattern was quite distinctive. Meanwhile in Titan, the journal article was widely criticized by the media and scientific community for making an unjustified accusation by declaring that Titan was intentionally hiding discoveries that might be developed commercially.

12. Recognizing the commercial implications of Perovsk's report, many in Titan's scientific and political communities became increasingly concerned about Perovsk's commercial intentions and some argued that hiding property belonging to all humankind from "greedy entrepreneurs" was justified. Many in Titan feared that Perovsk's discovery could signal the onset of large-scale exploitation of lunar materials in a way contrary to Titanite policy that outer space and its wealth belong to all humankind. A Titanite official commented that Perovsk risked starting a "colonialist gold rush" in outer space.

13. Aware of this concern, representatives of Fireskin were increasingly critical of the Outer Space Treaty and their CEO Felix Falkner was quoted as saying, "This sixty-



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year-old treaty has become a relic. We should scrap it and get on with colonizing the solar system and developing its business opportunities.”

14. Titanite concern was further increased later that year when Perovsk announced that its lunar shuttle had delivered important cargo to the *Tekla* station including an advanced 3D printer, and equipment capable of creating metal powder for the printer’s use from lunar materials. The 3D printer was sent to help construct material to provide more solid habitat walls for a larger *Tekla* station, and also to test the feasibility of creating structural components for a launch site and refueling station to be operated by Fireskin.

15. Midway through 2025, using their 3D printer and lunar materials, Perovskite astronauts working temporarily at the *Tekla* station produced regolith processing equipment, and placed it at three mineral-rich sites, one of which was within 15 km of the *Mondiale* station. That site showed tracks from at least one previous visit by Titan’s lunar rover. The installation of the processing equipment allowed Fireskin’s operations to become more efficient by processing regolith close to where it was mined and then only returning processed materials back to the *Tekla* base station for final refinement and use in the 3D printer.

16. Perovsk made no prior announcement of this expanded footprint for its lunar activity, but subsequently informed the UN Secretary General of the new installations on 12 August 2025, within two weeks of the new processing equipment becoming operational.

17. Many in Perovsk’s commercial space community began to argue that governments should leave entrepreneurs alone, and began petitioning for Perovsk to withdraw from the Outer Space Treaty so as to allow unambiguously for the commercial use of space resources.

18. Legislators in Perovsk’s parliament held a hearing on whether to remain a party to the Outer Space Treaty. After consultation with their foreign ministry, on 26 January 2026, Perovsk’s leaders formally notified the Depository Governments of the Outer Space Treaty that Perovsk would withdraw from that treaty one year subsequent to their receipt of that notification of withdrawal. Receipt of notification was acknowledged by the Depository Governments on 28 January 2026.



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19. Concerned that Perovsk was setting up a major industrial facility and that its pulverization of ilmenite was releasing oxygen that interfered with *Mondiale*'s scientific research on the lunar atmosphere, Titan arranged in February 2027 for its mobile surveying unit to inspect Perovsk's one processing installation that was located within the range of its robotically-operated rover.

20. During this inspection Titan's rover collided with the processing unit. Three factors contributed to the collision: a minor and unexpected solar event disrupted communication; the three-second delay in roundtrip communications from the Earth to the Moon prevented timely response once communication was restored, and the lunar regolith at the site was steeper and looser than Titan had observed in its previous visit to the site prior to the unit's installation. Although loud voices in Perovsk argued that the damage had been intentional, the parties both agree that Titan had not intended to cause damage to the processing unit. This collision nonetheless caused sufficient damage for the processor unit's fail-safe software to shut the installation down. It remains out of service, and its lack of availability has caused setbacks and delays in Perovsk's and Fireskin's lunar operations.

21. The inspection confirmed, however, that trace amounts of oxygen were being released into the lunar boundary exosphere in sufficient volume to account for the anomalous readings Titan had begun to see in mid-2025 on the scientific instruments at the *Mondiale* station, which had been gathering data on the tenuous lunar atmosphere. Citing interference with its scientific work at *Mondiale* station, Titan sent a demarche to Perovsk and demanded the dismantlement of the remaining ilmenite processing equipment. They also stressed that Perovsk was spoiling the priceless and previously intact *Novum Organum* landing and exploration sites, and disrupting the pristine lunar environment.

22. Perovsk responded to the demarche by issuing a public declaration in which it refused the demand, noting that it had not only established a 5 km safe zone that Fireskin had respected, but had also placed its processing units so that none was closer than 15 km from *Mondiale*. The declaration also stated that if Titan had published the results of its explorations predating the establishment of the *Tekla* regolith processing stations, Fireskin might have selected different sites for its equipment that would not have caused Titan concern.



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23. With political tensions rising rapidly, the leaders of Perovsk and Titan met in May 2027 to seek a peaceful resolution to their disputes. Their conversations led both leaders to conclude that domestic political circumstances made it impossible for a negotiated compromise on matters in dispute to be reached.

24. Perovsk initiated these proceedings by Application to the International Court of Justice, and submitted this Agreed Statement of Facts. Both Titan and Perovsk explicitly notified the Court that they consent to the full jurisdiction of the Court as provided for in Article 36 of the ICJ statute, and the full list of sources in both Article 38 (1) and (2) of the ICJ statute. There is no issue of jurisdiction before the Court.

25. (1) Perovsk requests the Court to adjudge and declare that:
- a. Perovsk was under no obligation to notify or consult Titan about activities at the *Tekla* station, and that under the principles of *ex aequo et bono*, Perovsk has the right to continue its activities on the Sea of Tranquility.
 - b. Titan violated international law by failing to disclose its discoveries on the Moon, that Titan failed to notify Perovsk before inspecting its lunar facilities, and that Titan is liable for the damage to Perovsk's property on the Moon.
- (2) Titan requests the Court to adjudge and declare that:
- a. Perovsk's activities on the Moon violated international law by failing to consult with Titan, and that Perovsk must be compelled to cease its lunar processing and production activities, the despoliation of the *Novum Organum-1* site, and the impermissible appropriation of the Moon.
 - b. Titan was permitted to inspect Perovsk's processing stations, and is not liable to Perovsk for damages incurred.

26. Both Perovsk and Titan are Member States of the United Nations, and are parties to the 1968 Rescue Agreement, the 1969 Vienna Convention on the Law of Treaties, the 1972 Liability Convention, and the 1975 Registration Convention. Titan is also a State Party to the 1967 Outer Space Treaty, and the 1979 Moon Agreement. Perovsk has never signed the 1979 Moon Agreement.



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Timelines of major events for easy reference

Mid-1970's – Using launch and descent stage services provided by Perovsk, Titan completes two robotic missions to the Moon: *Novum Organum-1* and *Novum Organum-2*, both of which operated on the Moon's Sea of Tranquility.

2019 – Titan begins operations of the *Mondiale* station on the Moon's Sea of Tranquility.

Fall 2022 – Perovsk's regulatory authorities grant launch license to One-Zero and mission authorization to Fireskin.

31 December 2023 – Goldrush launch from La Mancha Spaceport, Perovsk.

Mid-2025 – *Tekla* station astronauts install next generation lunar regolith processing units at various places on the Sea of Tranquility.

12 August 2025 – Perovsk notifies the UN of its expanded lunar footprint and upgraded activities.

Mid-2025 – Titan's lunar atmospheric project scientists begin seeing anomalous and inconsistent readings in their data.

26 January 2026 – Perovsk formally notifies Depository Governments of the Outer Space Treaty of intention to withdraw from that treaty one year subsequent.

28 January 2027 – Perovsk withdraws from the Outer Space Treaty.

February 2027 – Titan's inspection of *Tekla's* lunar processing unit followed shortly thereafter by Titan's demarche demanding dismantlement of Perovsk's lunar ilmenite processing equipment.

May 2027 – Titan's and Perovsk's officials meet to discuss and settle lunar activities dispute, without success.



2017

Manfred Lachs Space Law Moot Court Competition

Special Clarification to the 2017 Lachs Competition Problem

The reference to *ex aequo et bono* in the first submission in the Problem does not apply beyond that express reference.

The Manfred Lachs Moot Court Committee
IISL

October 2016