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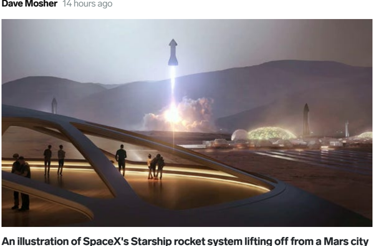
SpaceX wants to impose its 'own legal regime' on Mars for human settlements. A space law expert says that's dubious, but Earth should take it seriously anyway.

Dave Mosher 14 hours ago


An illustration of SpaceX's Starship rocket system lifting off from a Mars city and heading back to Earth. SpaceX/YouTube

- **Elon Musk wants to build a settlement on Mars using Starship, a new fully reusable rocket system that SpaceX is developing to carry 100 people per flight.**
- **SpaceX's general counsel recently said he's drafting "a constitution for Mars" and that the company may impose its "own legal regime" on the red planet.**
- **SpaceX apparently wants Mars to be "a free planet" where "no Earth-based government has authority or sovereignty," according to terms of service for Starlink, SpaceX's satellite-based internet service.**
- **However, Frans von der Dunk, a professor of space law, says SpaceX won't get any Martian state recognized without skillful international diplomacy and major changes to space law.**
- **Though it's uncertain SpaceX will ever establish a Mars settlement, von der Dunk said Earth should start discussing how to handle such a future anyway.**
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SpaceX may try impose its "own legal regime" on Mars and form a "self-governing," self-sustaining settlement where Earth laws wouldn't apply.

Though this may sound like a page taken out of a sci-fi novel, Elon Musk's aerospace company has indicated its intentions to do just that in two recent and remarkable posts.

The first is a wide-ranging Law360 interview with SpaceX general counsel David Anderman, who revealed he's drafting a constitution for Mars. The second is the terms of service for Starlink, SpaceX's new satellite-internet project, which Reddit users shared after receiving a public beta test invitation.

But to get Earth to recognize the sovereignty of any would-be Martian state, SpaceX will have to pull off some astounding diplomacy and changes to international law, says Frans von der Dunk, a leading expert of space law at Nebraska College of Law.

"You can come up with many interesting examples where you have people trying to call themselves a state and not being recognized," von der Dunk told Business Insider.

Still, he thinks the international community should take SpaceX and its founder Elon Musk seriously — and use the moment to work out potential legal quandaries of such a fantastic human future before they're made real.

"We never know if it's going to work or when it's going to work," von der Dunk said of SpaceX's planned Martian settlement. "But this is certainly a serious company with serious backing and serious engineering behind it."

'The parties recognize Mars as a free planet'

Elon Musk's vision of Starship enabling the buildup of a city on Mars. SpaceX

Musk has for many years shared his dream of populating Mars with more than a million people. Though he wants to create cities complete with bars and pizza joints — and quickly — the tech mogul's ultimate goal is "enabling human life on Mars," ideally to back up our species from some indeterminate future catastrophe.

To that end, SpaceX has expanded its facilities in South Texas to develop and test Starship, a nearly 400-foot-tall steel launch system that's fully reusable. If it works as intended, the cost of flying anything to space could shrink 100- to 1,000-fold. In line with that effort, the company has begun mulling its legal approach to rocketing colonists en masse to the red planet.

"Our goal is to be able to send 1,000 starships with 100 people in them every two years," Anderman told Law360, which published its interview on October 14. "We'll start with 100, then a couple hundred, then 100,000, then a million until we have a truly sustainable colony. It will happen in my lifetime. Faster than you think."

When asked if US law would govern such a settlement, Anderman revealed he's helping draft "a constitution for Mars."

"I think SpaceX will move to impose our own legal regime. I think it will be interesting to see how it plays out with terrestrial governments exerting control," he added. "I do think we are going to have a pretty important role to play in what works and what laws apply."

About two weeks after that interview ran, several Reddit users posted the terms of service for Starlink. The text contained most of what one would expect from a mundane internet service provider agreement. Yet in a section about which laws would govern use of Starlink, the document stated the following:

"For Services provided on Mars, or in transit to Mars via Starship or other colonization spacecraft, the parties recognize Mars as a free planet and that no Earth-based government has authority or sovereignty over Martian activities. Accordingly, Disputes will be settled through self-governing principles, established in good faith, at the time of Martian settlement."

In effect, SpaceX has signaled its diplomatic intentions to make its Martians rule themselves. However, von der Dunk says the company won't pull that off without extraordinary effort on Earth.

SpaceX did not immediately acknowledge Business Insider's request for comment.

Right now, the US would be responsible for SpaceX's Mars settlement

An illustration of SpaceX's planned Starship rockets standing on launch pads of a city on Mars. SpaceX/Twitter

Mars is an average of 158 million miles away from Earth, making the idea of enforcing laws made on Earth, for Earth there seem potentially laughable (despite the existence of a US Space Force).

Still, the Outer Space Treaty of 1967, to which 110 nations are currently party — including spacefaring ones like China, India, Russia, and the US — dictates that people who leave Earth carry their national identities with them.

"If [SpaceX] succeeds in building settlements, [Musk] and the people living there, certainly if they are Americans, will still be falling under the US jurisdiction," von der Dunk said. "Not because it's US territory, but because they are US citizens."

Additionally, Article 6 and Article 7 of the treaty make clear that a country bears the legal burden of its space activities no matter who launches or performs them. Because SpaceX is an American company operating under American licenses, the US would have to assume liability for SpaceX's hardware and actions.

"Imagine if [SpaceX does] something that other states could claim are violation of international law," von der Dunk said. "They don't need to try and sue SpaceX before a US court in a private capacity; they can directly accost the US government."

So if anything bad happens at SpaceX's Martian settlement, the company could feel the squeeze back on Earth, to the point of potentially interfering with its settlement plans.

Von der Dunk also says "there is no clear-and-fast guideline as to when you are state," but he noted international law does settle around three objective criteria: established territory, a permanent population, and a functional government.

Any would-be Mars settlement would presumably fulfill the latter two requirements. But von der Dunk says the first is impossible to check off as laws are currently written. (He noted the "space kingdom" Asgardia, which announced its purported plans to create a nation-state in open space, is even more subject to this problem.) Specifically, Article 2 of the Outer Space Treaty eschews the idea of owning territory beyond Earth, mainly to prevent nations from claiming land on heavenly bodies simply by landing probes there.

"That's what the Outer Space Treaty clearly prohibits," von der Dunk said. "It never thought about the possibility that you'd create a state entirely in outer space."

'It is important to keep an eye on these things'

An illustration of SpaceX's Starship spaceship entering the Martian atmosphere and using its heat shield, or thermal protection system, to deflect the superheated plasma. SpaceX

Von der Dunk says Earth's nations could move to change or do away with Article 2, or perhaps craft some legal loophole to permit SpaceX to form a self-governing Martian settlement.

"But I think it would be a very difficult exercise, and it certainly won't happen soon," he added. "And, as you can imagine, if this is more likely either a US territory or a territory of US citizens who then create their own new state, countries like China and Russia may not be very sympathetic to the idea."

And that leads to what von der Dunk described as a subjective and "murky" fourth requirement: International recognition of a new state.

"I think, at the end of the day, it all boils down to whether or not the rest of the world, in particular the major spacefaring nations, would agree to that," he said.

Two historical examples of the world struggling to accept a new nation stand out, he added.

First there's Taiwan, which technically fulfills all three of the objective criteria of a state — it has territory, a permanent population, and its own government. But on the world stage, China and others dispute the independence of Taiwan, and it has no seat at the United Nations.

There's also the United States. In 1776, when a young and scrappy coalition of colonies declared their independence from British rule, a number of countries declined to recognize the fledgling and war-torn nation. This changed during and after the American Revolutionary War, which ended in 1783.

So while it's not impossible for SpaceX to form a sovereign Martian state recognized by Earth's nations, von der Dunk said the bar remains high with changing Article 2 and earning international recognition of sovereignty.

"Neither of them are, by their own nature, eternal. So I can't completely exclude that, 50 years from now, we will have a state on Mars," he said.

For that reason, and the fact that SpaceX is a corporation, Von der Dunk said it's important to take seriously the company's plans and work to develop sensible regulation — even if it seems unlikely Musk will ever get his cities on the red planet.

"SpaceX is a private company, and they want to make money," he said. "It is important to keep an eye on this and to generate international discussions and to make sure things are going in the right [direction] — that you do not get a settlement on Mars which turns out to be totally reckless and without any regard for what we, on Earth, consider in the overarching interest of humanity."

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