Peter Thiel competes with Elon Musk with German company

Rivada Space from Munich is building a satellite internet for companies only, similar to SpaceX's Starlink. The project is backed by well-known investors and high-ranking US politicians.

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Berlin, Düsseldorf. It's a new competitor that Elon Musk needs to take seriously: Rivada Space Networks wants to build a global satellite internet that is remotely similar to that of Musk's company SpaceX. The start-up from Munich has not only

Personal expression from well-known investors such as Peter Thiel, but has also already collected extensive orders.

The volume already amounts to more than ten billion dollars, as company CEO Declan Ganley told Handelsblatt- and by the end of the year it is expected to be up to 15 billion dollars. "We are more than satisfied," explained Ganley.

Rivada Space has already been contacted by 113 clients. The customers are mainly from the telecommunications industry, but also from the energy and pharmaceutical sectors. Governments are also indirectly involved, including the US Department of Defence.

Even if the deals are only preliminary contracts so far, the interest is considerable for a small company from Munich. Unlike Starlink's offering, Rivada Space's network will be physically decoupled from the Internet- which is why it is called "Outernet"- and is aimed exclusively at companies and governments.

Rivada Space: Peter Thiel and Karl Rove are investors

The more than 70 investors include a sovereign wealth fund from the Middle East, private equity firms and the German-American Peter Thiel. Thiel was one of Mark Zuckerberg's earliest supporters in the development of Facebook and was also a former business partner of Elon Musk- now he is becoming a competitor with Rivada Space. "The name Thiel helps a lot in the talks," says Ganley. The well-known US political consultant Karl Rove has also given money.

In fact, there are still some talks to be held with bankers and venture capitalists. The constellation is expected to cost a total of 2.4 billion dollars. However, Ganley is "confident" that he will be able to finance the first expansion stage planned for 2026 with 300 satellites, i.e. half of the Outernet, primarily with venture capital, but also with loans.

Rivada Space was founded by German aerospace engineer Matthias Spott. He had shown foresight in 2014 when he secured the first frequencies from the UN agency International Telecommunication Union (ITU), which are required to set up a satellite internet. At the time, Spott even beat SpaceX to the punch. Musk's company only submitted its first application to the ITU ten days later.

Rivada Space's so-called Ka-band is a sought-after frequency. "For a long time, nobody wanted to hear about it," says Spott. Today, according to industry circles, the value of the spectrum is estimated at seven to twelve billion dollars.

Mike Pompeo sits on the Board of Directors

"The market for B2B satellite internet is very large," says Manfred Hader, Partner at the consultancy Roland Berger, who did not want to comment directly on Rivada Space.

"Terrestrial structures are not sufficient due to the exponential growth in data, and many places in the world are not covered." Companies and governments can use the space internet to connect oil platforms or factories or control container shuttles.

However, experts consider Rivada Space's goal of completing the first expansion stage of the satellite internet in 2026 to be ambitious. "From a technical perspective, there is still a long way to go," says Andreas Knopp, Professor of Information Processing at the University of the Federal Armed Forces in Munich. The solution approaches are there, but implementing them technically, testing them and correcting errors is "a big task", according to Knopp.

The importance of the project can be seen from the board of directors of the US parent company Rivada Networks. Numerous high-ranking politicians sit on the board, including Mike Pompeo, former US Secretary of State and CIA chief, and Richard Myers, former general and top security adviser to the White House. Austrian telecoms investor Peter Goldscheider also has a seat.

Control centre near Munich

Founded in 2004, Rivada Networks specialised in communications technology for the US military and police and had excellent relations with the Republican Party. However, the German subsidiary Rivada Space Networks GmbH, founded in 2022, now plays a central role in the company's business model.

The satellite constellation is being set up from Munich and Berlin under the management of Clemens Kaiser. The control centre is to be built near Munich. The engineering team mainly comes from the former German start-up Kleo Connect. Two thirds of the total of 128 employees are based in Munich and Berlin.

Customers generally pay several hundred million dollars with contract terms of three years or longer. "I'm surprised at how quickly the topic has caught on with companies," says

Programme Director Kaiser. "They want more security and resilience for their data. They no longer trust the peace, at least since the undersea cables were cut by the Houthis."

Court cases with Chinese investors

Spott, Kaiser and others involved in Kleo Connect brought the Americans on board two years ago to finance the expansion of the constellation- and to settle with Chinese investors who had invested in Kleo Connect in 2018.

The two sides had fallen out over the years. The Germans feared a sell-out to China and the Chinese military, while the Chinese felt cheated out of their investment. A year ago, the German government prohibited a sale to China. According to Rivada Space Networks, more than 144 lawsuits are still pending in various courts around the world.

All of this initially deterred investors, but not so much Rivada Networks with its relationships with the highest conservative circles in the USA. "The Chinese Communist Party recognised the value of the frequencies early on and wanted to secure them," says Ganley. "In the wrong hands, they could be used for military purposes and would be a real threat."

According to Ganley, the numerous complaints from the Chinese did not deter Pompeo, for example, from joining the Board of Directors. After all, the former Secretary of State was personally sanctioned by China in 2021.

The satellite becomes a router

Rivada Space will put its network into orbit at an altitude of 1050 kilometres. Each of the 600 satellites will be in constant contact with the other satellites using at least four lasers.

The satellites will also act as routers, providing at least ten gigabits per second. For comparison: according to Kaiser, it takes one gigabit per second to autonomously control a container ship.

The data is sent back to earth via "RF beams"- a beam at a specific radio frequency. These illuminate circles 80 kilometres in diameter on the ground and can be picked up by customers' antennas. This way, the data does not come into contact with the internet.

"Some of the smartest engineers work there"

Unlike Starlink, the satellites will orbit in a so-called "polar synchronised" orbit, i.e. fly over both poles of the earth. In this orbit, they can cover all latitudes of the world. They will also fly in an orbit twice as high, allowing a satellite to reach a larger part of the Earth's surface.

Due to its placement in orbit and its inclination to the equator, Rivada Space needs significantly fewer satellites than Starlink, which can put a total of 12,000 satellites in the sky with its licences. Rivada Space, on the other hand, will place a total of 300 satellites in orbit by 2026 and another 300 satellites in space by 2028.

Will the Rivada Space project in Munich succeed? "The smartest engineers work there," says Salem El Nimri, Head of Space Technology at Amazon's cloud provider AWS, who works with Rivada. "The constellation will make many great things possible."