

China Launching State Rival to Elon Musk's SpaceX

China aims to launch as many as 10,000 satellites to create a new StarNet network and stake its low-Earth orbit claim vis-a-vis US

By Frank Chen

Asia-Pacific Research, November 18, 2020

Asia Times 17 November 2020

Region: <u>China</u> Theme: <u>Defence</u>

China's state-owned telecommunications carriers plan to launch as many as 10,000 satellites in the next five to ten years to form a constellation in low-Earth orbit and keep pace with US rivals.

Chinese cadres overseeing space technologies were reputedly jolted by space entrepreneur **Elon Musk's** recent assertion that with 775 satellites up and running in orbit his SpaceX company had leapfrogged NASA as the world's largest satellite operator.

Musk made the claim when as many as 60 American satellites for SpaceX's Starlink highspeed global Internet access project were launched last month from his company's Falcon-9 rocket.

In comparison, China currently has just 432 satellites in orbit, according to space exploration data cruncher n2yo.com.

Now, Beijing is thus ratcheting up its push to launch more satellites for a Chinese "StarNet" project before the United States and private firms like SpaceX fill the entire lower orbital space.

Chinese **President Xi Jinping** signed off on the new five-year 2025 space exploration program earlier this year. The masterplan will pool state-owned enterprises and private entities and aims to keep pace with the US and SpaceX in a budding new race to launch satellites and other spacecraft.

China Newsweek, a publication run by the official China News Service, reported in October that China Telecom's satellite communications arm had kickstarted an ambitious launch plan for 10,000 satellites in the next five to ten years.

The magazine cited Ministry of Industry and Information Technology sources as saying that a giant state enterprise would soon be formed in Shanghai to coalesce efforts, resources and assets under a sole operator of China's future satellite communications network, tentatively to be named China StarNet.

New satellite communications technologies also featured in Beijing's latest initiative to speed up infrastructure developments, which was unveiled by the State Council in April to spur the then-Covid-battered economy and internal demand.

At the same time, there is reportedly dissent among policy advisors about whether StarNet and its related launches are really needed now that 4G and 5G networks operated by China Telecom, China Mobile and China Unicom cover most big cities and even more sparsely populated regions like Tibet, Xinjiang and Inner Mongolia.

Xinhua quoted experts who doubted the commercial viability of China's proposed version of Starlink. They said SpaceX could be expected to recoup its hefty investments from its growing user base across America's agrarian states, where cellular coverage is still lacking.

In comparison, they said, China's ground-based telecommunications infrastructure was well developed and accessible throughout the nation thanks to Beijing's no-village-left-behind drive to expand telecom services.

Top policymakers have so far brushed aside those commercial objections, which have apparently taken a back seat to Beijing's broader drive to stake its claim to space territory and related resources.

Xie Tao, CEO of Commsat, a Beijing-based private satellite Internet service provider and a contractor of China Telecom, told reporters that China must move quickly as operational satellites and those scheduled to launch would soon fill the low-Earth orbit's reported capacity of 100,000 birds.



A Commsat satellite launch, August 6, 2016. Image: Twitter

"Space in the orbit is allocated on a first-come, first-served basis and the onus will be on these latecomers to ensure their satellites will not collide with existing ones," Xie said. "The low-Earth orbit is becoming increasingly crowded and the space land grab is on."

"Frequency and bandwidth resources are getting even more scarce as there is a rush by countries and private firms to file applications with the United Nations' International

Telecommunication Union for new frequencies," said Xie, who added that China could not afford to be a laggard in the scramble for orbit and frequency resources.

Xie said that when China's StarNet becomes operational, China Telecom could consider decommissioning its base stations scattered across China's far western regions, particularly those situated in depopulated areas, to slash service costs.

China Telecom's chief technology officer Bi Qi told China News Service that the optimal download speed of satellite Internet could hit 1.5 gigabytes per second and the unit cost of data transmission could be lowered to 4G levels.

China Telecom's public relations department and Commsat declined to comment on Asia Times' request for comment on reports that other state-owned telecoms carriers are also partners in the StarNet project.

They also declined to comment on hints in the PLA Daily's WeChat account that the military could transfer some of its satellite technologies to help build a Chinese version of Elon Musk's Starlink.

*

Note to readers: please click the share buttons above or below. Forward this article to your email lists. Crosspost on your blog site, internet forums. etc.

Featured image is from Twitter

The original source of this article is <u>Asia Times</u> Copyright © <u>Frank Chen</u>, <u>Asia Times</u>, 2020

Comment on Global Research Articles on our Facebook page

Become a Member of Global Research

Articles by: Frank Chen

Disclaimer: The contents of this article are of sole responsibility of the author(s). Asia-Pacific Research will not be responsible for any inaccurate or incorrect statement in this article. Asia-Pacific Research grants permission to cross-post Asia-Pacific Research articles on community internet sites as long the source and copyright are acknowledged together with a hyperlink to the original Asia-Pacific Research article. For publication of Asia-Pacific Research articles in print or other forms including commercial internet sites, contact: editors@asia-pacificresearch.com

www.asia-pacificresearch.com contains copyrighted material the use of which has not always been specifically authorized by the copyright owner. We are making such material available to our readers under the provisions of "fair use" in an effort to advance a better understanding of political, economic and social issues. The material on this site is distributed without profit to those who have expressed a prior interest in receiving it for research and educational purposes. If you wish to use copyrighted material for purposes other than "fair use" you must request permission from the copyright owner.

For media inquiries: editors@asia-pacificresearch.com