



## **Starlink in the Philippines: What You Need To Know**

By Mark Maylan – March 1, 2021

<https://sugbo.ph/2021/starlink-philippines/>

The recent talk made by some Philippine government officials and SpaceX's (Space Exploration Technologies, Corp.) representative last December 8, 2020 made the launching of Starlink in the country a possibility in the future.

This is not just extremely exciting but also, given the current pandemic situation, timely and relevant to the country.

In a virtual conference, SpaceX's Vice President for Satellite Government Affairs Patricia Cooper and Senator Aquilino "Koko" Pimentel III discussed the satellite broadband project and the possibility of including the Philippines among its service areas.

During the online meeting, Cooper mentioned the third quarter of 2021 as the possible rollout period of Starlink in the Philippines.

The SpaceX representative further stressed out that the country will benefit immensely from Starlink's low latency and reliable internet which can make possible the following value-added services especially during the current pandemic: effective contact tracing and quarantine monitoring; online education and remote learning, enhanced security, emergency and disaster preparedness, and more accessible government services.

### **WHAT IS STARLINK?**

Starlink is a communication satellite network operated by Elon Musk's SpaceX, currently limited in some parts of the United States and Canada. It consists of thousands of small satellites deployed in low Earth orbit and works in combination with ground transceivers.

Product development started in 2015. Two test-flight satellites were launched in February 2018. Then in May 2019, Starlink deployed 60 operational satellites. The company was launching up to 60 satellites at a time since then, and as of February 4, 2021, it launched a total of 1,085 satellites. Its goal is to deploy 1,440 satellites to provide near-global service by late 2021 or 2022.

Starlink is now delivering initial beta service both domestically and internationally. During beta, users can expect to see data speeds vary from 50Mb/s to 150Mb/s and latency from 20ms to 40ms in most locations over the next several months as we enhance the Starlink system. There will also be brief periods of no connectivity at all.

You can visit their website for updates: <https://www.starlink.com/>

### **STARLINK: HOW DOES IT WORK?**

Starlink customers receive internet communication from the satellites orbiting Earth via a phased-array dish antenna and Wi-Fi router device. Additionally, SpaceX plans to build hundreds of 'Starlink Gateways' which are ground stations that will offer a more stable connection to its customers.

The field of view is important for Starlink setup. It would look like a single beam between the Starlink satellite and the Starlink. As the satellite moves, the beam also moves, and if an object obstructs the field of view like buildings or trees, the internet service will be interrupted. Heavy rain or wind can also affect Starlink's connection.

Another important thing to take note about Starlink is that you cannot travel with it or move it to a different address. The location where you initially set up Starlink is referred as a cell. Starlink satellites are scheduled to send internet down to these cells. This is constrained by geometry and is not arbitrary geofencing.

### **STARLINK: A NEW ALTERNATIVE FOR THE COUNTRY'S INTERNET ACCESS DILEMMA**

Pimentel said Starlink's broadband service would ensure that unserved and underserved rural communities in the Philippines will be given access points to the internet. "In this new normal, Filipinos deserve nothing but the full benefits of digitization as a constitutional right," he emphasized at the Upper House's plenary session.

He also highlighted the importance of improving broadband connectivity in the country. He hopes that the Philippines will be one of the first countries in Southeast Asia to be covered by the Starlink satellite internet, which has already been launched in North America and the United Kingdom.

In a press conference, Senator Grace Poe expressed her enthusiasm about the prospect of Starlink becoming a new player in the country's telecommunications industry. She noted that the costs of SpaceX's internet services provider would initially be much higher than existing market rates but would become more affordable over time.

As of writing, Starlink costs USD 99/month. The hardware costs USD 499, then shipping and handling of USD 50, plus taxes. Orders will be fulfilled on a first-come, first-served basis and could take 2-4 weeks or more, depending on where you are in the ordering queue.

According to a study released by the Philippine Institute for Development Studies (PIDS), bad Internet connection is a pressing problem in the country alongside poverty and corruption. And with COVID-19, a meaningful internet connection is now a prerequisite to be "productive." The absence of a meaningful internet connection, especially in unserved and underserved communities, means many workers, learners, and citizens will be excluded and left behind.